



VII Simpósio Internacional de Fissuras Orofaciais e Anomalias Relacionadas

24 e 25 de março de 2023, Bauru, SP



Programa de Pós-Graduação em
Ciências da Reabilitação • HRAC-USP



Anais

Realização



Apoio



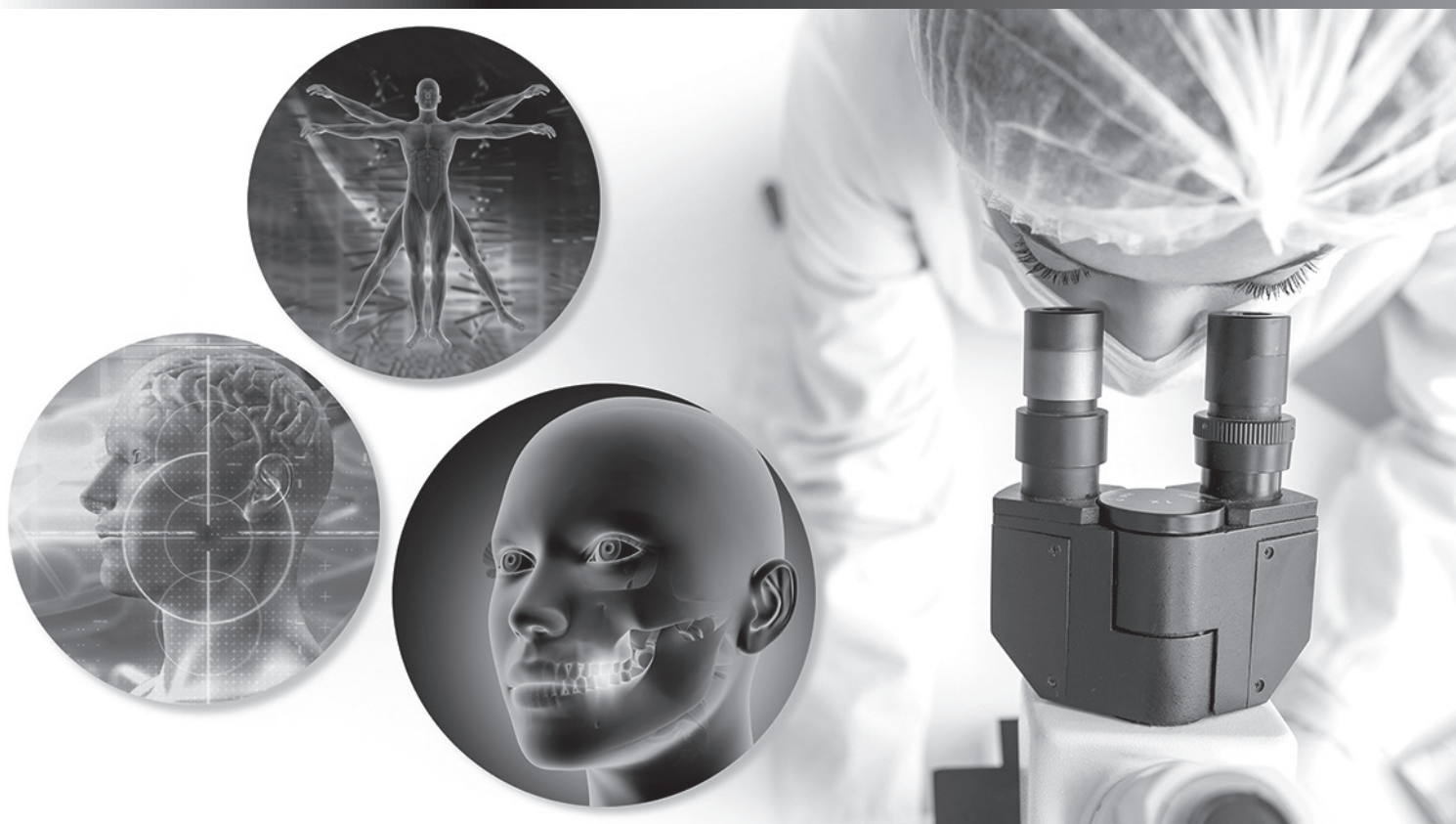


VII Simpósio Internacional de Fissuras Orofaciais e Anomalias Relacionadas

24 e 25 de março de 2023, Bauru, SP

25 ANOS
1998 • 2023

Programa de Pós-Graduação em
Ciências da Reabilitação • HRAC-USP



Anais

ISBN: 978-65-86796-03-2

Realização



Apoio



Hospital de Reabilitação de Anomalias Craniofaciais • Universidade de São Paulo (HRAC-USP)
Rua Sílvio Marchione, 3-20 • Vila Universitária • CEP: 17.012-900 • Bauru - SP

Anais do VII Simpósio Internacional de Fissuras Orofaciais e Anomalias Relacionadas • Programa de Pós-Graduação em Ciências da Reabilitação do HRAC-USP • Hospital de Reabilitação de Anomalias Craniofaciais da Universidade de São Paulo (HRAC-USP).

Reitor da USP

Prof. Dr. Carlos Gilberto Carlotti Junior

Superintendente do HRAC-USP

Prof. Dr. Carlos Ferreira dos Santos

Coordenadora do Pós-Graduação em Ciências da Reabilitação HRAC-USP

Profa. Dra. Ivy Kiemle Trindade-Suedam

COMISSÃO CIENTÍFICA

Profa. Dra. Ivy Kiemle Trindade-Suedam

Profa. Dra. Jeniffer de Cássia Rillo Dutka

Profa. Dra. Alessandra Mazzo

Profa. Araci Malagodi de Almeida

Profa. Dra. Ana Lúcia Pompéia Fraga de Almeida

Profa. Dra. Claudia Resende Leal

Profa. Dra. Flavia Ferlin

Profa. Dra. Luciana Paula Maximino

Profa. Dra. Maria Natalia Leite de Medeiros Santana

Profa. Dra. Priscila Padilha Moura

Profa. Dra. Renata Paciello Yamashita

Profa. Dra. Renata Sathler Zanda

Profa. Dra. Roseli Maria Zechi Ceide

Profa. Dra. Simone Soares

Profa. Dra. Terumi Okada Ozawa

Ana Carla Pasquini Abu Yaghi Nogueira

Ariany Garcia da Silva

Bruno Mariano Ribeiro Braga

Caroline de Paula Oliveira Gringo

Caroline Chepernate Vieira dos Santos

Eduardo Luis Goldoni

Fabio Luiz Banhara

Lais Hollara Medeiros

Leide Vilma Fidélis da Silva

Luciano Reis de Araújo Carvalho

Patricia Bueno Martins

Marina Bigeli Rafacho

COMISSÃO ORGANIZADORA

Ana Lucia Pires de Mello
Ana Regina Carvalho
Bruno Mariano Ribeiro Braga
Caroline de Paula Oliveira Gringo
Flavia Ferlin
Laís Hollara Medeiros
Lavinia Ribeiro
Leide Vilma Fidélis da Silva
Ligia Gabrielle Sanches Mariotto
Luciano Reis de Araújo Carvalho
Marcio Antonio da Silva
Maria Carolina Neves
Maria José Bento
Maria Natalia Leite Medeiros Santana
Patricia Martins Bueno

COMISSÃO DE APOIO

Aline Fernanda Baradel
Ana Carla Pasquini Abu Yaghi Nogueira
Ana Paula Dias
Ariany Garcia da Silva
Caroline Chepernate Vieira dos Santos
Daísa Guerreiro Bernardes
Josué Vasconcelos Miranda
Luciana Nascimento Madeiro de Oliveira
Luiza Ruiz Simão
Maryana Lourenço Bastos do Nascimento
Sarah Spilari

Projeto gráfico, arte e editoração • Marisa Romagnolli (Analista de Comunicação - Medicina USP Bauru)

Simpósio Internacional de Fissuras Orofaciais e Anomalias
Relacionadas (7. : 2023 : Bauru, SP)
Anais VII Simpósio Internacional de Fissuras Orofaciais
e Anomalias Relacionadas [livro digital] , 24 e 25 de março
2023 / Hospital de Reabilitação de Anomalias Craniofaciais da
Universidade de São Paulo. -- Bauru : Hospital de Reabilitação de
Anomalias Craniofaciais, Universidade de São Paulo, 2023.

ISBN 978-65-86796-03-2

1. Fissura orofacial 2. Anomalia craniofacial. T.



SUMÁRIO



PÁGINA

APRESENTAÇÃO	11
RESUMOS • PESQUISAS COM RESULTADOS PARCIAIS OU COMPLETOS	
3D Tomographic assessment of the pharyngeal airway in adults with Robin Sequence. <i>SCOMPARI L, Ribeiro AA, Noel M, Trindade-Suedam IK</i> [01]	16
3D Upper airway tomographic assessment of adolescents and adults with Treacher Collins Syndrome. <i>DOS INOCENTES RJM, Marzano-Rodrigues MN, Yatabe-Ioshida MS, Ribeiro AA, Trindade-Suedam IK</i> [02]	17
AleitaCleft: Construction of a website regarding breastfeeding in infants with orofacial cleft. <i>BATISTA NT, Antonio CT, Bom GC, Manso MMFG, Trettene AS</i> [03]	18
Alveolar bone graft and nursing care in the pre and post operative. <i>SOUZA AMS, Almeida ALPF</i> [04]	19
Assessment of the internal nasal dimensions of individuals with cleft lip and/or palate and obstructive sleep apnea by computed tomography. <i>LOUREIRO NB, Marzano-Rodrigues MN, Trindade-Suedam IK, DAquino A, Trindade SHK</i> [05]	20
Bite force of individuals with cleft lip and palate before and after orthognathic surgery. <i>BUENO PM, Medeiros LH, Fidelis Da Silva LV, Trindade PAK, Trindade-Suedam IK</i> [06]	21
Bite force, masticatory performance, and its relationship with the nutrition of adult individuals with Treacher Collins Syndrome. <i>MEDEIROS LH, Silva LVF, Bueno PM, Barros SP, Trindade-Suedam IK</i> [07]	22
Breastfeeding in infants with orofacial cleft: validation of a website. <i>BATISTA NT, Antonio CT, Farinha FT, Bom GC, Manso MMFG, Trettene AS</i> [08]	23
Can hypodontia associated with non-syndromic oral cleft influence familial recurrence for clefts? <i>FARHA ALH, Neves LT</i> [09]	24
Canine eruption pathway after alveolar grafting with different materials in patients with complete UCLP. <i>BRAGA BMR, Leal CR, Carvalho RM, Bernardes DG, Ozawa TO</i> [10]	25
Characteristics of long-term average spectra at the different degrees of hypernasality. <i>PREARO GA, Farha A, Marino VCC, Pegoraro-Krook MI, Dutka JCR</i> [11]	26
Cochlear implant in ossified cochleas. <i>ADAM FRAGA G, Zabeu JS, Lourençone LFM</i> [12]	27
Cognitive performance in six brazilian male with Optiz GBBB Syndrome and pathogenic variation in the MID1 gene. <i>RAFACHO MB, Siemann ME, Serrão VT, Kokitsu-Nakata NM, Almeida MLG, Miotto EC, Zechi-Ceide RM</i> [13]	28
Education in right of people with craniofacial anomaly: The role of the health professional. <i>RALA ETL, Dutka JCR</i> [14]	29



Evaluate of bone graft and bone regrant to dental implants installation in the cleft area. GONÇALES MG, Almeida ALPF [15]	30
Evaluation of the types of sphenoid sinus in patients with cleft lip and palate cone beam computerized tomography: Partial results. GRINGO CPO, Yaedú RYF [16]	31
Executive functions and coping in people with cleft lip and palate. MOTTA ND, Ferreira FR, Silva ES, Tabaquim MLM, Pegoraro-Krook MI, Dutka JCR [17]	32
Follow-up for 6 years two treatment protocols in the palate of children with orofacial cleft. SILVEIRA ABV, Ambrosio ECP, Jorge PK, Peixoto YCTM, Carrara CFC, Machado MAAM, Oliveira TM [18]	33
GestaCleft: Construction of a website with information for pregnant women of babies orofacial cissure. BOM GC, Batista NT, Mondini CCSD, Paccola SAO, Trettene AS [19]	34
Gestational diabetes mellitus and high-risk pregnancy supervision in the São Paulo state during 2012 to 2022. ALVES DE SOUZA L, Farina Puntel L, Silva Araújo E, Negrato CA, Freitas-Alvarenga K [20]	35
Health communication as an instrument of promotion, protection and recovery of health of the person with cleft lip and palate. CEZAR T, Oliveira JL, Tomasevicius Filho E, Dutka JCR [21]	36
Humanization in times of the Covid-19 pandemic: a more than essential relationship. BUSQUETI JVS, Braga BMR, Bachega MI, Almeida ALPF [22]	37
Impact of low-level laser therapy on early orofacial sensitivity recovery after orthognathic surgery. ALMEIDA CBP, Junqueira ATF, Bastos Junior JCC, Carvalho RM, Yamashita RP [23]	38
Impact of the Covid-19 pandemic on surgical treatment in patients with cleft lip and palate. FARINA PUNTEL L, Almeida DMBM, Araújo ES, Alvarenga KF [24]	39
Incidence of Covid-19 in adult individuals with cleft lip and palate enrolled at HRAC-USP. RUIZ SIMÃO L, Ferreira dos Santos C, Santiago Junior JF, Garcia-Usó M, Trindade-Suedam IK [25]	40
Investigation of urinary disorders in patients with craniofacial abnormalities: a scope review. SANTOS GX, Mazzo A [26]	41
Judicialization involving demands for treatment of craniofacial abnormalities: fissures and syndromes with associated cissures. COSTA SR, Machado MAAM [27]	42
Legislation that recognize CLP as a condition that can cause disability in Brazil. CEZAR T, Regini VBG, Tomasevicius Filho E, Dutka JCR [28]	43
Manual for pharyngeal bulb molding during nasoendoscopy. ANDRADE LKFA, Dutka JCR, Pinto MDB, Whitaker ME, Sousa OMV, Lopes MMV, Aferri HC, Pegoraro-Krook MI [29]	44
Masticatory function in individuals with complete unilateral cleft lip and palate submitted to bimaxillary orthognathic surgery: Preliminary results. BUENO PM, Medeiros LH, Fidelis Da Silva LV, Trindade PAK, Trindade-Suedam IK [30]	45
Middle ear and hearing in cleft lip and palate: long term outcomes. SOUZA AG, Antoneli MZ, Dutka JCR [31]	46



Molluscum contagiosum virus endogenous viral elements found in human genetics sequences associated with orofacial clefts. <i>MESSIAS TS, Silva KCP, Soares S</i> [32]	47
Nasal patency after orthognathic surgery in individuals with cleft lip and palate: a review of 523 cases at a tertiary hospital in Brazil. <i>SEIXAS DR, Maia SES, Yamashita RP, Silva ASC, Araújo BMAM, Fukushima AP</i> [33]	48
Nasopharyngeal morphometry in adults with cleft lip/palate and obstructive sleep apnea: analysis by cone beam computed tomography and 3D reconstruction. <i>DAQUINO A, Rodrigues MN, Loureiro NB, Trindade-Suedam IK, Trindade SHK</i> [34]	49
Non-syndromic cleft palate: pattern of family occurrence. <i>SILVA CM, das Neves LT</i> [35]	50
Outcomes of alveolar graft associated with premaxillary osteotomy performed with RHBMP-2 versus iliac bone. <i>RESENDE LEAL C, Rocha LA, Carvalho RM, Faco RAS, Alonso N, Ozawa TO, Tonello C</i> [36]	51
Perception of health professionals working in a tertiary hospital regarding the patient safety climate. <i>CARVALHO PVS, Gazola M, Matiole CR, Trettene AS</i> [37]	52
Perception of the nursing team at a rehabilitation hospital for craniofacial anomalies regarding patient safety. <i>MATIOLE CR, Manso MMFG, Bom GC, Carvalho PVS, Trettene AS</i> [38]	53
Pharyngeal bulb reduction program in individuals with cleft palate. <i>PEGORARO-KROOK MI, Aferri HC, De Souza OMV, Lopes MMW, Whitaker ME, Pinto MDB, Marino VCC, de Andrade LKF, Draghi LA, Fukushima AP, Dutka JCR</i> [39]	54
Pharyngeal bull reduction program in individuals with cleft palate: linear measurements. <i>AFERRI HC, Souza OMS, Lopes MW, Siecola MW, Pinto MDB, Dutka JCR, Pegoraro-Krook MI</i> [40]	55
Phonoaudiological assessment in patients after palatoplasty and clinical correlation. <i>MOURA LB, Antoneli MZ, Santos ACA, Ruiz DMCF, Alonso N</i> [41]	56
Pre and post-surgical orthopedics on dental arches of children with cleft lip and palate: comparison between protocols at the first year of life. <i>MELLO-PEIXOTO YCT, Ambrosio ECP, Cerón-Zapata AM, López-Palacio AM, Jorge PK, Silveira ABV, Carrara CFC, Machado MAAM, Oliveira TM</i> [42]	57
Prevalence of obstructive sleep apnea in children with Robin Sequence and operated cleft palate: polysomnographic evaluation. <i>BANHARA FL, Sena LMF, Trindade-Suedam IK, Trindade SHK, Trindade IEK</i> [43]	58
Profile of patients registered at HRAC-USP residents in the northern coast of São Paulo State and impact on the treatment due to Covid-19 pandemic. <i>SAMERSLA MOP, Santos CF</i> [44]	59
Rare nonsyndromic craniofacial clefts in 90 brazilian individuals: clinical and etiological aspects. <i>VIRMOND L, Kokitsu-Nakata NM, Serigatto HR, Moura PP, Vendramini-Pittoli S, Tonello C, Zechi-Ceide RM</i> [45]	60



Relationship between surgical skeletal movement and upper airway changes in patients with cleft lip and palate. CARVALHO LRA, Silveira ITT, Duarte BG, Gomes JPF, Yaedú RYF [46]	61
Self-perception of body image in children with orofacial cleft. MILLENA DE OLIVEIRA T, Silva VKC, Menegatti CL, Ivatiuk AL [47]	62
Sleep-disordered breathing in individuals with Treacher Collins Syndrome: clinical and polysomnographic analysis. FIDÉLIS DA SILVA LV, Medeiros LH, Bueno PM, Trindade SHK, Trindade-Suedam IK [48]	63
The ectopic nasal bone: a Hallmark of the Oculoauriculofrontonasal Syndrome. SERIGATTO HR, Kokitsu-Nakata NM, Moura PP, Vendramini-Pittoli S, Tonello C, Zechi-Ceide RM [49]	64
The effect of the type of orthognathic surgery on the nasality of individuals with cleft lip and palate. MAIA SES, Seixas DR, Fukushima AP, Yamashita RP [50]	65
The effect of the type of orthognathic surgery on the velopharyngeal function of individuals with cleft lip and palate. MAIA SES, Seixas DR, Fukushima AP, Yamashita RP [51]	66
The role of nasoendoscopy in the fabrication of pharyngeal bulb prosthesis in patients with hypodynamic velopharynx. ANDRADE LKFA, Pegoraro-Krook MI [52]	67
Trans operative predictors of hypernasality after orthognathic surgery in individuals with cleft lip and palate: preliminary results. DUARTE BG, Yaedú RYF, Silveira ITT, Araújo BMAM, Silva ASC, Yamashita RP [53]	68
Upper airways dimension increase in cleft lip and palate children submitted to the rapid maxillary expansion protocol with maxillary protraction with facemask. SANTOS YA, Rodrigues LM, Ayrea LCG, Repeke DB, Repeke CEP [54]	69

RESUMOS • PROJETO DE PESQUISA APROVADO PELO CEP

Analysis of masticatory function and its relationship with the nutritional status of individuals with Treacher Collins Syndrome. MEDEIROS LH, Silva LVF, Bueno PM, Barros SP, Fukushima AP, Trindade-Suedam IK [55]	71
Classification of pterygomaxillary suture after Le Fort I osteotomy in cleft patients using cone beam computed tomography. SILVEIRA ITT, Reis LAC, Barcellos BM, Yaedú RYF [56]	72
Clinical findings related to altered speech intelligibility after orthognathic surgery in patients with cleft lip and palate. SILVA MLC, Silva ASC, Araújo BMAM, Fukushima AP [57]	73
Evaluation of the impact of alveolar bone graft surgery on the nasal internal dimensions of individuals with cleft lip and palate using computed tomography. NASCIMENTO MLB, Loureiro NB, Rodrigues MNM, Trindade-Suedam IK, Trindade SHK [58]	74
Identification of the hypodyne velopharynx in cleft palate. MELO DA SILVA C, Pegoraro-Krook MI [59]	75
Pharyngeal obturator prosthesis in children with cleft lip and palate in the primary dentition. PETRONI VBP, Aferri HC, Lopes MMW, Dutka JCR, Pegoraro-Krook MI [60]	76



Photobiomodulation in patients with cleft lip and palate undergoing orthognathic surgery – Analysis with infrared thermography. SANTOS CCV, Almeida ALPF [61]	77
Potential impacts of the Covid-19 pandemic on the social communication and pragmatic skills of children with cleft lip and palate. RONDINA IS, Dutka JCR, de Souza OMV, Pegoraro-Krook MI [62]	78
Prevalence of sleep breathing disorders in individuals with chromosome 22q11.2 Deletion Syndrome and its relationship with cardiorespiratory capacity. SPILARI S, Zechi-Ceide RM, Kokitsu-Nakata NM, Trindade-Suedam IK, Trindade SHK [63]	79
Rhythmic features of speech of cleft palate subjects: acoustic analysis as tool for speech therapy practice. TONOCCHI R, Oliveira GM, Nishida G, Dutka JCR, Pegoraro-Krook MI, Tonocchi R [64]	80
Sleep and breathing in individuals with Treacher Collins Syndrome: Comparison of two polysomnographic methods for the diagnosis of obstructive sleep apnea. FIDÉLIS DA SILVA LV, Medeiros LH, Bueno PM, Trindade SHK, Trindade-Suedam IK [65]	81
Stereophotogrammetry facial analysis of patients with cleft lip or/and palate. NOGUEIRA VO, Neves MC, Soares S [66]	82
Study of septal deviation patterns, nasal lateral wall malformations and inferior nasal turbinates dimensions in patients with complete unilateral cleft lip and palate. KAYO GML, Benatti CZ, Nascimento ML, Loureiro NB, Trindade-Suedam IK, Trindade SHK [67]	83
Surgical correction of lower lip eversion in patients with cleft lip: research project. MARIOTTO LGS, Carvalho LRA, Gringo CPO, Gomes JPF, Yaedú RYF [68]	84
Tomographic study of dental anomalies of endodontic interest in an individual with cleft lip and palate. NOGUEIRA ACPA, Pinto LC [69]	85
Translation cross cultural adaptation and validation of the bone anchored questionnaire into Brazilian Portuguese. PELANDA-ZAMPRONIO CD, Oliveira JRM, Maximino LP [70]	86

RESUMOS • RELATO DE CASO CLÍNICO

A novel missense variant P.SER118ARG in EFNB1 causing ocular hypertelorism and cleft lip and palate in a boy and craniofrontonasal syndrome phenotype in his mother. GALVANIN AL, Kokitsu-Nakata NM, Vendramini-Pittoli S, Zechi-Ceide RM [71]	88
Aesthetic-functional rehabilitation with orthognathic surgery in a patient with cleft lip and palate. GRINGO CPO, Barcellos BM, Mello MAB, Yaedú RYF [72]	89
Baraitser-Winter Cerebrofrontofacial Syndrome: An additional Brazilian case report. SERIGATTO HR, Kokitsu-Nakata NM, Di Donato N, Guion-Almeida ML, Zechi-Ceide RM [73]	90
Bimaxillary orthognathic surgery in a patient with unilateral cleft lip and palate – Case report. CASTRO-MERAN AP, Carvalho LRA, Mariotto LGS, Mello MAB, Ferreira Junior O, Yaedú RYF [74]	91



Challenges of severe discrepancies in orthognathic surgery: Case report. <i>DIAS RS, Silveira ITT, Mello MAB, Mariotto LGS, Yaedú RYF</i> [75]	92
CLP and craniofacial anomalies in Santa Cruz de La Sierra, Bolivia. Challenges for a rehabilitation team. <i>MEDRANO-GUTIERREZ A, Yaedú RYF, Miranda S, Mendes P, Ferreira O, Dalben GS</i> [76]	93
Complex treatment of siblings with Van Der Woude Syndrome. <i>BERNARDES DG, Braga BMR, Peixoto AP, Kokitsu-Nakata NM, Ozawa TO</i> [77]	94
Conservative orthodontic treatment of severe skeletal Class III malocclusion in a patient with lip and palate cleft: a case report. <i>RUFINO SS, Penhavel RA</i> [78]	95
Decrease in oxygen saturation in nutritional suction in child with isolated Robin Sequence: case report. <i>WANDERLEY CMS, Fukushiro AP, Miguel HC, Trindade-Suedam IK</i> [79]	96
Diagnosis, treatment and evolution of a patient with cleft lip and palate. <i>SANTOS KG, Gomes JPF, Mariotto LGS, Yaedú RYF</i> [80]	97
Familial case of Popliteal Pterygium Syndrome: orofacial cleft variability. <i>VIRMOND L, Kokitsu-Nakata NM, Serigatto HR, Zechi-Ceide RM</i> [81]	98
Generalized hypercementosis in a patient with hypothyroidism and cleft lip and palate. <i>PRETO KA, Santos GL, Ferreira GR, Oliveira DT</i> [82]	99
Intensive speech therapy using CPAP and visual biofeedback of the velopharynx with nasoendoscopy – Clinical report. <i>PIERIM VIEIRA F, Santos JV, Brandão GR, Bento-Gonçalves CGA</i> [83]	100
Mandibular symphysis bilateral alveolar bone grafting. <i>BRAGA BMR, Ozawa TO, Carvalho RM, Leal CR</i> [84]	101
MTA Apical Plug: Successful approach during endodontic reintervention in a tooth with anatomical complexity in an area of cleft lip and palate. <i>MENESES JÚNIOR NS, Nogueira ACPA, Andrade FB, Pinto LC</i> [85]	102
Multiple odontogenic keratocysts recurrence in patient with nevoid basal cell carcinoma Syndrome. <i>PRETO KA, Santos GL, Trindade PAK, Oliveira DT</i> [86]	103
Odontogenic keratocyst associated with asperlogilosis in a syndromic patient. <i>VILLELA BERBERT DANIEL A, Santos GL, Yaedú RYF, Oliveira DT</i> [87]	104
Orofacial myofunctional disorders secondary to frontonasal dysplasia and cleft lip and palate: clinical case report. <i>MELLO LLN, Medeiros-Santana MNL</i> [88]	105
Orthodontic treatment in a patient with Robinow Syndrome – Case report. <i>DE OLIVEIRA LNM, Dalben GS, Boca AC, Das Neves LT, Porto Peixoto A</i> [89]	106
Orthognathic surgery of a patient with unilateral cleft lip and palate: Case report. <i>GOMES JPF, Yaedú RYF, Barcellos BM, Mello MAB</i> [90]	107
Pathogenic variation in SMCHD1 causing arhinia: a mild form of Bosma Arhinia Microphthalmia	



Syndrome? <i>SEGARRA VCD, Tonello C, Alonso N, Shaw N, Kokitsu-Nakata NM, Zechi-Ceide RM</i> [91]	108
Pre-surgical orthopedics in complete unilateral cleft of the lip, alveolus and palate previously cheiloplasty using the Fisher Technique. Case report. <i>GUANOLUIZA LA, Olmedo S, Vaca M</i> [92]	109
Step-by-step oral rehabilitation through lower implant-supported prosthesis for overdenture in a patient with cleft lip and palate. <i>COSTA LPG, Lopes JFS, Tavano RD, Pinto JHN, Amado FM, Azevedo RMG, Lopes MMW, Soares S, Mazzo A</i> [93]	110
The challenges of multidisciplinary rehabilitation of a patient with unilateral cleft lip and palate: a case report. <i>MARINHO BARCELLOS B, Toledo Teixeira da Silveira I, Sanches Mariotto LG, Yassutaka Faria Yaedú R</i> [94]	111
Treatment of vertical excess of premaxilla in bilateral cleft lip and palate patient: Case report. <i>RABELO IBM, Aguiar ALM, Olsson B, Sebastiani AM, Kluppel LE, Scariot R</i> [95]	112

RESUMOS • REVISÕES SISTEMÁTICAS

Factors associated with adherence to breastfeeding in infants with orofacial cleft: scope review. <i>BATISTA NT, Antonio CT, Farinha FT, Bom GC, Manso MMFG, Trettene AS</i> [96]	114
Maternal factors associated with the onset of orofacial clefts in the newborn. <i>AGUIAR ALM, Rabelo IBM, Oliveira BMB, Freitag IH</i> [97]	15
Oral rehabilitation in patients with palate prosthesis: Systematic review. <i>NEVES MC, Panigali OA, Nogueira JHP, Santiago JFJ</i> [98]	116

ÍNDICE • POR TÍTULO	117
---------------------	-----

ÍNDICE • POR AUTOR	123
--------------------	-----

TRABALHOS PREMIADOS	131
---------------------	-----



APRESENTAÇÃO



Em 16 de dezembro de 1997 o Conselho de Pós-Graduação da Universidade de São Paulo aprovou, por unanimidade, a **criação do Programa de Pós-Graduação em Ciências da Reabilitação do HRAC-USP**. No ano seguinte, em 13 de março de 1998, portanto, há exatos 25 anos, iniciou-se a primeira turma, formada por 56 alunos de Mestrado e Doutorado do HRAC-USP. O corpo de orientadores era formado por 14 docentes, ávidos por dar início a uma história de muito sucesso que se estende até os dias atuais.

O Programa foi criado e coordenado pela Profa. Dra. Inge Trindade, com o apoio do nosso querido Tio Gastão. Desde então, o Programa contou também com a liderança de outros docentes, Prof. Dr. José Roberto Pereira Lauris, Profa. Dra. Daniela Garib, Profa. Dra. Ana Paula Fukushiro, Profa. Dra. Jeniffer Dutka, por mim, Profa. Dra. Ivy Trindade Suedam. Hoje, 25 anos após, nosso corpo docente amadureceu e cresceu. **Somos 27 orientadores, docentes e pesquisadores de nível superior do HRAC. Já titulamos mais de 400 discentes** e, na data de hoje, temos 139 alunos regularmente matriculados, 80 de mestrado e 59 de doutorado.

Único no país e no mundo em sua área de concentração, o Programa de Pós-Graduação em Ciências da Reabilitação do HRAC-USP manteve seu nível de excelência na última avaliação quadrienal da CAPES, obtendo nota cinco. Além da elogiosa avaliação que recebemos da CAPES em todas as dimensões avaliadas, no fim de 2022, o Programa de Pós-Graduação do HRAC-USP foi reconhecido como Programa Estratégico pela CAPES, em razão da excelência na formação que provê aos seus discentes, do seu elevado impacto social nacional, do alto nível das pesquisas e publicações que realizamos, além das robustas atividades de internacionalização realizadas pelo corpo docente e discente. O acordo de cooperação técnica, firmado entre a CAPES e o HRAC inclui a concessão de 4,7 milhões, que estão sendo aplicados no formato de bolsas de estudos aos nossos alunos. Isso representa a concessão de 48 novas bolsas de mestrado, 20 de doutorado e 28 de pós-doutorado, parte já em vigência, além da concessão de verba de custeio para o desenvolvimento e financiamento de pesquisas e incremento de ações nacionais e internacionais. Trata-se de apoio nunca antes presenciado em nosso campus.

Particularmente, entendo que este apoio sem precedentes em nossa história traz responsabilidades também sem precedentes. Dentre elas, destaco três: 1) aumentar o número de alunos captados e titulados, 2) melhorar ainda mais a qualidade das pesquisas, e, 3) aumentar da quantidade e da qualidade de nossas publicações. Estes três itens conjugados, em última análise, revertem-se em melhorias para os nossos pacientes, nosso mais nobre objetivo.

Gostaria de ressaltar que o apoio da CAPES vem em momento oportuníssimo, uma vez que nossa Instituição passa por momento acadêmico único, no qual a expansão do escopo do HRAC, com a criação do HCB, se por um lado implica em mudanças, por outro lado representa significativo avanço para nossa comunidade acadêmica. É meu entendimento que o apoio da CAPES vem carregado de significado, evocando a seguinte mensagem: A CAPES (e nós) desejamos que as atividades assistenciais, de ensino e de pesquisa do



HRAC permaneçam, e mais ainda, cresçam, ampliem-se. E, de nossa parte, podemos garantir que esse é nosso mais profundo desejo e também nossa intenção e compromisso.

Mas as mudanças são muito bem-vindas, se agregarem boas experiências e se alargarem nossas fronteiras. Neste sentido, anunciamos, com alegria a submissão à PRPG-USP de pedido de criação de nova Área de Concentração em nosso Programa de Pós-Graduação. A nova área de concentração proposta se intitula Cuidado Interdisciplinar nos Diferentes Ciclos da Vida e visa ampliar o Programa de Pós-Graduação do HRAC para áreas além das Anomalias Craniofaciais. Dezesseis novos docentes e 14 novas disciplinas compõem a nova área e, certamente, receberemos um parecer positivo da PRPG e da CAPES.

Focando em nosso **VII Simpósio Internacional de Fissuras Orofaciais e Anomalias Relacionadas**, trata-se de tradicional evento realizado pelo Programa de Pós-Graduação em Ciências da Reabilitação do HRAC-USP, há 14 anos, no formato em que se encontra. Estudantes de graduação, pós-graduação e profissionais de centros reabilitadores de todo o país se reúnem para atualizar conhecimentos e realizarem a troca de experiências, na busca pela excelência dos tratamentos reabilitadores dos pacientes com anomalias craniofaciais. Pais e pacientes que querem acompanhar o simpósio são também muito bem-vindos!

Neste ano, o Simpósio Internacional tem **como tema “A REABILITAÇÃO E A PESQUISA NA NOVA ERA”** e tem como objetivos retomar, após um longo período de isolamento, as parcerias científicas nacionais e internacionais, congregando pesquisadores ao redor do tema das anomalias craniofaciais e fomentar a formação de recursos humanos, proporcionando aos nossos alunos de Pós-Graduação, e também da Graduação, o contato direto com temas que constituem a fronteira do conhecimento em nossa área de atuação. Ainda, estaremos celebrando o Jubileu de Prata do Programa e, concomitantemente, estaremos comemorando o **1º Encontro de Ex-alunos de Pós-Graduação do HRAC**, uma oportunidade única para rever amigos e celebrar o excelente período que vive nosso Programa! Destaco que o Simpósio está sendo organizado com muita minúcia e capricho por uma comissão de alunos de Pós-Graduação e Servidores que têm se dedicado com afinco a essa tarefa. Dentre eles, destaco a participação dos discentes Leide Fidelis, Laís Hollara, Patrícia Bueno, Luciano Reis, Thyago César e das servidoras Lavínia Ribeiro, Maria José Bento, Ana Regina Carvalho, Lucy Honda, Ana Lúcia Pires de Mello, Márcio Silva, Zelma Borges e Pricila Copedê Frascarelli.

O simpósio se inicia oficialmente no dia 24 de março, quando o teremos a celebração de abertura do evento no qual contratemos com prestigiosas presenças acadêmicas como o Magnífico Reitor da USP, Prof. Dr. Carlos Gilberto Carlotti Jr, nosso Estimado Pró-Reitor de Pós-Graduação, Prof. Dr. Márcio de Castro Silva Filho, Prof. Dr. Júlio Siqueira da CAPES, Prof. Dr. Carlos Ferreira dos Santos, Superintendente do HRAC e Profa. Dra. Marília Buzalaf, diretora da FOB-USP.

O evento, conta, tradicionalmente, com a participação de palestrantes internacionais, os quais vêm apresentar os resultados de pesquisas realizadas em suas Instituições e contribuir com o desenvolvimento de pesquisas no país. Neste ano, contaremos com a presença do Prof. Ronald Strauss, distinto professor da Universidade da Carolina do Norte, EUA, que proferirá fala sobre os impactos de se ter uma diferença facial,



na qual irá abordar de que forma a sociedade e as equipes clínicas podem gerir melhor o estigma que nossos pacientes carregam. Teremos, ainda, palestras sobre pesquisas internacionais que estão sendo desenvolvidas no HRAC e falas sobre interdisciplinaridade na pesquisa, e trend topics em pesquisa aplicada. Por fim, nossos pesquisadores terão a oportunidade de apresentar seus trabalhos de pesquisa no formato de pôster, todos presenciais. Os melhores trabalhos serão premiados.

Permeando o cenário acadêmico teremos depoimentos de pacientes reabilitados pelo HRAC, apresentações musicais feitas por alunos de Graduação e Pós-Graduação do campus e a exposição a “Ensaio para uma fissura” de artista plástico, também paciente reabilitado do Centrinho. Adicionalmente teremos como **Pré-Simpósio o I Encontro Brasileiro Direito à Reabilitação da Pessoa com Deficiência do HRAC-USP**, que terá como tema “A REABILITAÇÃO COMEÇA NA UNIVERSIDADE”. Um grupo de experts, do direito e áreas afins irão se reunir para discussões avançadas sobre o tópico

Se você tem interesse em conhecer um pouco mais sobre as anomalias craniofaciais, se aprofundar no tema, estar em contato com pesquisadores de destaque e na área das anomalias, e tem interesse em ser um aluno do HRAC participe do simpósio conosco, no Teatro Universitário da FOB. Tenho certeza que será uma experiência para toda a vida!”

Profa. Dra. Ivy Trindade-Suedam

Coordenadora do VII Simpósio Internacional de Fissuras Orofaciais e Anomalias Relacionadas

Coordenadora da Pós-Graduação do HRAC-USP



RESUMOS





PESQUISA COM RESULTADOS PARCIAIS OU COMPLETOS



01 3D TOMOGRAPHIC ASSESSMENT OF THE PHARYNGEAL AIRWAY IN ADULTS WITH ROBIN SEQUENCE

SCOMPARI L¹, Ribeiro AA¹, Noel M¹, Trindade-Suedam IK^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

INTRODUCTION: The Robin Sequence (SR) is characterized by a triad involving micrognathia, glossoptosis and airway obstruction. It is speculated that the micrognathia still observed in some adults with RS would negatively impact the morphophysiology of the upper airways (UAW).

OBJECTIVES: Being aware that the UAW are a key-point in the rehabilitation process of these patients, the present study aims at characterizing the pharyngeal morphology of adults with RS, by means of cone beam computed tomography 3D reconstructions of the UAW.

METHODS: The sample will be composed of CBCTs obtained retrospectively from adult individuals with RS. These will be compared with a control group of patients with Angle Class II facial pattern. The volume ("V" in cm³) and minimum sectional area ("CSA" in mm²) will be measured using the Dolphin Imaging software. The UAW will be divided into 3 segments: nasopharynx, oropharynx and hypopharynx. The measurements will be performed twice by the same evaluator in different time-points and by a second evaluator for ICC calculation.

RESULTS: It is expected to observe reduced UAW dimensions, including impairment of pharyngeal volumes and cross-sectional areas in the RS group when compared with the control group, which might explain respiratory and sleep disorders frequently observed in this population.

Financial support: CAPES



02

3D UPPER AIRWAY TOMOGRAPHIC ASSESSMENT OF ADOLESCENTS AND ADULTS WITH TREACHER COLLINS SYNDROME

DOS INOCENTES RJM¹, Marzano-Rodrigues MN¹, Yatabe-Ioshida MS², Ribeiro AA¹, Trindade-Suedam IK¹

1. Hospital de Reabilitação de Anomalias Craniofaciais-USP, Bauru

2. University of Michigan. Ann Arbor, MI, USA

OBJECTIVE: This study aims to evaluate UA morphology in adolescents and adults with TCS (TCS-ADOL and TCS-ADUL) in cone beam computed tomography (CBCT). In order to compare these results with a control group (CON), and evaluate the differences among TCS-ADOL and TCS-ADUL.

STUDY DESIGN: Retrospective cross-sectional study.

SETTING: Hospital for rehabilitation of Craniofacial Anomalies, University of São Paulo, Bauru - SP, Brazil.

METHODS: Sample was divided in 3 groups: TCS-ADOL (n=7): CBCTs of TCS-ADOL, 2) TCS-ADUL (n=10): CBCTs of TCS-ADUL, 3) CON (n=9): CBCTs of individuals without craniofacial anomalies, skeletal pattern Class II.

VARIABLES ANALYZED WERE: Volume (V) of total upper airway (TUA); nasal cavity V (NCV); total pharynx V (TPV); nasopharynx V (NPV); oropharynx V (OPV); minimal cross sectional area of nasopharynx (NPmCSA) and oropharynx (OPmCSA), pharyngeal length (PL) and pharyngeal depth (PD). CBCTS were analyzed for 2 examiners. ICC was calculated and $p \leq 0,05$ values were considered significant.

RESULTS: In all the variables (except OPV) reduced dimension were observed comparing TCS-ADUL vs. CON, with no statistical differences. Comparing TCS-ADOL vs. TCS-ADUL all the variables were reduced in TCS-ADOL (except PL). Significant differences were found in TUP, TPV, NPV, OPV, PL.

CONCLUSIONS: TUA of individuals with TCS are similar to non syndromic individuals, despite absolute values reductions found in syndromic group. The TUA, In adolescent population, are reduced in relation to adults with TCS, demonstrating significant growth, mainly in pharyngeal dimensions.

Financial support: CAPES



03

ALEITACLEFT: CONSTRUCTION OF A WEBSITE REGARDING BREASTFEEDING IN INFANTS WITH OROFACIAL CLEFT

BATISTA NT¹, Antonio CT¹, Bom GC¹, Manso MMFG¹, Trettene AS¹

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

OBJECTIVE: to build an educational technology in the format of a website, referring to breastfeeding in infants with orofacial cleft.

METHODS: methodological study, developed from a scope review, analysis of similar and target audience definition. For the construction, Systematic Instructional Design was used in the following stages: analysis, design and development, implementation and evaluation. In addition, multidisciplinary discussions were held with the help of professionals in the field of design and information technology. To build the technology, the Fabapp® platform was used, which dispenses with prior knowledge in programming.

RESULTS: the technology was developed in HTML format, entitled “AleitaCleft”. The target audience consisted of mothers, fathers, family members and other informal caregivers, in addition to health professionals. Eight icons were built, which addressed the following topics: about the definition of fissure, positions that facilitate breastfeeding, oral hygiene, what to do when it is not possible to breastfeed, where to seek help, in addition to a wall where it is possible to share experiences, which resulted in 18 screens. The fonts and colors were used in order to bring a concept of lightness, simplicity, calm and comfort, considered indispensable to the breastfeeding process. The logo was built with the idea of care and closeness, through a simple 2D drawing, where a child with a cleft was presented to the mother’s breast.

CONCLUSION: based on the steps established in the literature, the AleitaCleft website was built. Further studies are needed to include validation by specialists and applicability to the target audience.



04

ALVEOLAR BONE GRAFT AND NURSING CARE IN THE PRE AND POST-OPERATIVE

SOUZA AMS¹, Almeida ALPF²

1. Hospital de Reabilitação de Anomalias Craniofaciais-USP, Bauru

2. Faculdade de Odontologia de Bauru - FOB/USP, Bauru

OBJECTIVE: to describe nursing care for patients undergoing secondary alveolar bone grafting in the pre- and postoperative periods.

METHODS: descriptive, cross-sectional, retrospective and quantitative research, involving sources of secondary data from medical records of patients with unilateral transforamen incisor cleft who were candidates for alveolar bone graft, of both sexes, from 9 to 15 years old, from January 2019 to March 2020, during hospitalization at HRAC/SP.

RESULTS: 100 medical records were used and the periods were subdivided into Times (T), being T0 – Pre-Operative Period – 24h before the procedure, from admission with pre-surgical care, T1 – Immediate Post-Operative Period – next 24 hours after the procedure and T2 – Mediate Post-Operative Period - after 48 hours from the graft until the time of discharge. Based on the distribution of frequencies by age group, the mean was determined: 12.3 years; variance: 4.66; standard deviation: 2.16; median: 12.51 and mode: 12.75, with the majority of the sample being male, Caucasian, from the left unilateral transforamen incisor fissures group, the predominant chin graft donor area, and 85% also have hearing impairment. We identified 21 nurse activities during the pre and postoperative periods of these patients: leadership, sizing, material forecast, flow organization, guidelines, information, surgical map, specialties, systematization of nursing care, records, water intake, food, oral hygiene, complaints, eliminations, sleep, vital signs, inspection of the surgical incision and donor area, complications, peripheral venous access and care for intercurrents.

CONCLUSION: the nurse is more involved with care attributions in these cases, corresponding to 62%, and 38% managerial attributions.



05

ASSESSMENT OF THE INTERNAL NASAL DIMENSIONS OF INDIVIDUALS WITH CLEFT LIP AND/OR PALATE AND OBSTRUCTIVE SLEEP APNEA BY COMPUTED TOMOGRAPHY

LOUREIRO NB¹, Marzano-Rodrigues MN¹, Trindade-Suedam IK^{1,2}, D Aquino A¹, Trindade SHK^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru;

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

AIMS: To evaluate nasal cavity volumes, perimeters, and cross-sectional areas (CSA) of individuals with CL/P and OSA or primary snoring, by tomographic image analysis, compared to individuals with OSA without CL/P (N-CL/P).

METHOD: Participants were divided into two groups: G1) CL/P+OSA or primary snoring (n=11); and G2) CL/P+OSA (n=13). From cone-beam computed tomography, the nasal cavities were segmented and reconstructed using the ITK-SNAP 3.8.0 software. In the SpaceClaim software, the 3D geometries were then used for computed aided design (CAD) models development, aiming at measuring volumes, areas, and perimeters of this anatomical structure. CEP: 42052921.4.0000.5441.

RESULTS: Nasal cavities total volume, from the nostril to the nasal valve region (V1), and from the nasal valve to the upper limit of the nasopharynx (V2), although smaller in the CL/P+OSA group, did not differ from the CL/P+OSA group ($p>0.05$). The CSA and the perimeter of the nasal valve regions also did not differ statistically between groups ($p>0.05$). Otherwise, the CSA, and perimeter of the upper limit of the nasopharynx were significantly increased in those with CL/P+OSA than in the CL/P+OSA group ($p\leq 0.05$).

CONCLUSIONS: Nasal internal geometry of patients with CL/P and OSA did not present significant differences in relation to apneic patients without CL/P. The internal nasal dimensions of patients with CLP do not seem to constitute a risk factor for the occurrence of OSA, as well as its greater severity, in this special group of patients.



06

BITE FORCE OF INDIVIDUALS WITH CLEFT LIP AND PALATE BEFORE AND AFTER ORTHOGNATHIC SURGERY

BUENO PM¹, Medeiros LH¹, Fidelis Da Silva LV¹, Trindade PAK², Trindade-Suedam IK³

1. PhD student, Postgraduate Program in Rehabilitation Sciences, Laboratory of Physiology, Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo, HRAC-USP

2. Oral and Maxillofacial Surgeon, Orthognathic Surgery, Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo, HRAC-USP

3. Associate Professor, Department of Biological Sciences, FOB-USP and Laboratory of Physiology, HRAC-USP.

OBJECTIVE: To evaluate the impact of orthognathic surgery on the stomatognathic system of individuals with repaired CLP by assessing bite force (BF).

MATERIAL AND METHODS: Forty individuals were prospectively divided into 2 groups: 1) CON: 20 individuals without CLP (10 male, 10 female, 20y±7.4), 2) CLP: 20 individuals with CLP and with indication for OS (11 male, 9 female, 23.5y±5.9; 10 unilateral; 10 bilateral), BF was evaluated in the immediate preoperative period (PRE), 3 months postoperatively (POST3M) and 6 months postoperatively (POST6M), by means of a gnathodynamometer (IDDK Kratos, Cotia-SP, Brazil).

RESULTS: BF of the CLP was significantly lower than that of the CON in all evaluated periods. BF of individuals with CLP was significantly lower in POST3M when compared to PRE and POST6M. Although not significant, BF was increased in POST6M when compared to PRE. A significant increase in BF was observed between POST3M and POST6M. The BF of unilateral and bilateral CLP individuals were statistically similar. Males presented a BF almost twice as high as females.

CONCLUSION: Cleft lip and palate negatively impacts BF. Although BF values increased 6 months after orthognathic surgery, it was still significantly reduced when compared to control individuals, not reaching normative values.

Financial support: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)



07

BITE FORCE, MASTICATORY PERFORMANCE, AND ITS RELATIONSHIP WITH THE NUTRITION OF ADULT INDIVIDUALS WITH TREACHER COLLINS SYNDROME

MEDEIROS LH¹, Silva LVF¹, Bueno PM¹, Barros SP¹, Trindade-Suedam IK^{1,2}

1. Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo - HRAC/USP, Bauru

2. Bauru School of Dentistry, University of São Paulo - FOB/USP, Bauru.

OBJECTIVE: To assess the bite force (BF), masticatory performance (MP), and its relationship with the nutritional status (NS) of adult individuals with Treacher Collins Syndrome (TCS) and to compare these data with a control group (CON).

METHODOLOGY: This cross-sectional study was approved by the institutional CEP nº 2.856.780. Data from 41 individuals was collected for 12 months. They were divided into 2 groups: 1) CON: 20 non-syndromic adult individuals, 2) TCS: 21 adult individuals with the syndrome. Both groups were submitted to the following exams: 1) BF, by means of gnatodynamometer (IDDK, Kratos), 2) MP, by the masticatory cycle tests (Image J®), 3) NS, composed by Body Mass Index (BMI) assessment and 24-hour recall to assess food intake of macronutrients (Nutralife®).

RESULTS: The mean BF values for the CON and TCS groups corresponded to 431.6 ± 134.1 N - 170.9 ± 109.4 N (right molars) and 427.4 ± 147.8 N - 171.2 ± 93.9 N (left molars), these differences were statistically significant. The mean particle size of the MP TCS 1.58 ± 1.93 mm² and CON 0.66 ± 0.52 mm², this difference was not considered statistically significant. Regarding the NS, BMI between groups was statistically similar CON 23.4 ± 4.7 and TCS 23.4 ± 6.1 and differences in the consumption of macronutrients were observed for the group respectively CON and TCS carbohydrates $41\% \pm 9.5$ - $52\% \pm 8.2$ and lipids $39.32\% \pm 7.35$ - $29.5\% \pm 7.1$. Both groups presented a similar intake of proteins 19.7 ± 6.5 - $18.7\% \pm 4.5$.

CONCLUSION: Individuals with TCS had a significant BF reduction, but no differences were observed in the MP nor the NS when compared with the control individuals.

Financial support: CAPES and Nutralife®.



08

BREASTFEEDING IN INFANTS WITH OROFACIAL CLEFT: VALIDATION OF A WEBSITE

BATISTA NT¹, Antonio CT¹, Farinha FT¹, Bom GC¹, Manso MMFG¹, Trettene AS¹

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

OBJECTIVE: to validate an educational technology in the format of a website, referring to the encouragement of breastfeeding in infants with orofacial cleft.

METHODS: Face and content validation was performed using the Delphi technique to obtain consensus among specialists through cycles. Aesthetics, scope, clarity and relevance were evaluated using a Likert-type scale with scores from 1 to 5, with 4 and 5 positive responses, 3 neutral and 1 and 2 negative. To assess the level of agreement between specialists, the Content Validity Index (CVI) was used with a percentage of 80%.

RESULTS: the website was titled AleitaCleft. Seven specialists participated, two nurses, one doctor, one nutritionist, one design professional, one computer technology professional and one informal caregiver. It took two cycles to reach consensus among raters. In the first, the CVI was: 0.97, 1.00, 0.94 and 1.00 for aesthetics, scope, clarity and relevance, respectively, and in the second cycle, 1.00 for all evaluated items, reaching 100% agreement.

CONCLUSION: the AleitaCleft website was considered valid for use in the education process of informal caregivers and health professionals, aiming to encourage breastfeeding in infants with orofacial cleft. Future studies using this educational technology are needed to assess its effectiveness with the target audience.



09

CAN HYPODONTIA ASSOCIATED WITH NON-SYNDROMIC ORAL CLEFT INFLUENCE FAMILIAL RECURRENCE FOR CLEFTS?

FARHA ALH¹, Neves LT²

1. Hospital de Reabilitação de Anomalias Craniofaciais-USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: To investigate whether individuals with orofacial cleft (OP) coursing with hypodontia outside the cleft region had a higher frequency of familial recurrence of OC in offspring when compared to individuals with cleft without hypodontia.

METHODS: An analysis was performed on the medical records of individuals enrolled at the Hospital for Rehabilitation of Craniofacial Anomalies with non-syndromic FO and positive and negative diagnosis of hypodontia confirmed by imaging records. Through family information, we identified whether they had children with or without clefts. The individuals were divided into 2 groups: FH (individuals with FO and hypodontia) and FI (individuals with isolated cleft, without hypodontia).

RESULTS: The general series consisted of a sample of 39 participants. Of the 9 volunteers in the FH group, 2 of them had children with clefts. Of the 30 volunteers in the FI group, 4 of them had children with clefts. For statistical analysis, the chi-square test was applied, adopting $p < 0.05$ as statistically significant to compare the two groups regarding the prevalence of OC recurrence in the offspring. No statistically significant differences were found ($p=0.517$).

CONCLUSION: The results of this study were not enough to state that individuals with OC associated with the presence of hypodontia have a higher frequency of OC recurrence in offspring when compared to individuals with OC alone. However, this hypothesis cannot be rejected, as this is a pioneering exploratory study. To confirm this theory, further studies should be carried out with a larger sample and more detail and pairing of groups.

Financial support: CAPES



10

CANINE ERUPTION PATHWAY AFTER ALVEOLAR GRAFTING WITH DIFFERENT MATERIALS IN PATIENTS WITH COMPLETE UCLP

BRAGA BMR¹, LEAL CR¹, CARVALHO RM¹, BERNARDES DG¹, OZAWA TO¹

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

OBJECTIVE: To compare the behavior of permanent canines on the cleft side (PCCS) in individuals with complete unilateral cleft lip and palate (UCLP) submitted to secondary alveolar grafting (SAG) with different materials.

MATERIAL AND METHODS: This retrospective longitudinal study analyzed 120 individuals underwent SAG with iliac crest bone, rhBMP-2 and mandibular symphysis. The individuals were selected at a single center and equally divided into three groups. Panoramic radiographs were analyzed by Dolphin Imaging 11.95 software to measure PCCS angulation and PCCS height from the occlusal plane at two different timepoints.

RESULTS: No statistical significance was found between grafting materials ($P=0.416$). At T1, the PCCS height from the occlusal plane was greater for rhBMP-2 and mandibular symphysis compared to iliac crest bone. The lateral incisor on the cleft side was not related to success or lack of eruption of PCCS ($P=0.870$).

CONCLUSION: Impaction rates of PCCS were similar for the materials studied. The absence of the lateral incisor on the cleft side did not prevent spontaneous eruption of PCCSs.

Financial support: CAPES



11

CHARACTERISTICS OF LONG-TERM AVERAGE SPECTRA AT THE DIFFERENT DEGREES OF HYPERNASALITY

PREARO GA¹, Farha A², Marino VCC³, Pegoraro-Krook MI^{1,2}, Dutka JCR^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

3. Faculdade de Filosofia e Ciências da Universidade Estadual Paulista “Júlio de Mesquita Filho” – UNESP, Marília

OBJECTIVE: The identification of hypernasality is performed through auditory-perceptual assessment and can be corroborated by instrumental evaluations. However, access to this equipment is often not accessible in craniofacial centers and speech therapy(ST) offices. In this context, spectral analysis is the most accessible resource for ST. Literature little has described the spectral characteristics of hypernasality in its different degrees. This study describes and compares the characteristics of the Long-term Average Spectra(LTAS) of speech samples without and with hypernasality.

METHODS: 192 recordings, with oral context, were selected and were grouped according to cleft history and degree of hypernasality: Group SemFi: WITHOUT cleft and hypernasality(n=40); ComFi-Ausente: WITH cleft and WITHOUT hypernasality(n=55); ComFi-Leve: WITH cleft and mild hypernasality(n=38); ComFi-Moderada: WITH cleft and moderate hypernasality(n=59). LTAS was performed using Praat and the amplitude values were extracted with intervals of 0.1kHz, ranging from 0 to 4kHz. Mean values were established for the 4 groups.

RESULTS: The LTAS results showed significant differences between the degrees of hypernasality evaluated for the frequencies 0.1 to 1.2kHz and de 2.1 to 4kHz. Based on the visual inspection of the graph, at the 0.3kHz the greater degree of hypernasality, the greater the peak amplitude at this frequency. For 0,3kHz significant differences are related SemFixComFi-Ausente; SemFixComFi-Leve; SemFixComFi-Moderada, and ComFi-AusentexComFi-Moderada. There were no significant differences between ComFi-AusentexComFi-Leve and ComFi-LevexComFi-Moderada.

CONCLUSION: The different degrees resulted in different spectra, making it possible to establish the preliminary characteristics of the LTAS without and with hypernasality.

Financial support: CAPES



12 COCHLEAR IMPLANT IN OSSIFIED COCHLEAS

ADAM FRAGA G¹, Zabeu JS¹, Lourençone LF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVE: The present study aims to report the speech perception of users of cochlear implants through a retrospective analysis of medical records of patients submitted with a standardized surgical technique and using the same electrode in all surgeries at the HRAC-University of Sao Paulo, Brazil.

METHODS: This is a retrospective and descriptive analysis of medical records of all patients who underwent surgery for cochlear implantation with a Med-El® Compressed electrode, in the Cochlear Implant Sector of the HRAC/USP.

RESULTS: Seventy patients using Cochlear Implant MED-EL, device Sonata Ti 100, Compressed electrode array, who underwent surgery between 2009 and 2020 at HRAC-USP were analyzed. The main etiology of cochlear implant indication was post-meningitis deafness (65%), followed by congenital hearing loss (24%) and otosclerosis (4%). Among the congenital causes, there are, in addition to the idiopathic ones, brachio-oto-renal syndrome, cardiofacial syndrome and Dandy-Walker syndrome. Despite the high frequency of ossification, electrode insertion was partial in 11 ears (20%) and total in 43 ears (80%). Of the total number of ears of patients studied (n=54), three already had an open-set Speech Perception Test (recognition of words or sentences) in the preoperative period, those with meningitis and congenital hearing loss as etiology, who underwent surgery with six, seven and ten years old.

CONCLUSION: The main etiology of cochlear implant indication was post-meningitis deafness, and despite the high frequency of ossification, electrode insertion was complete in most ears. Improvements in speech perception tests and hearing categories were observed in the five-year follow-up of patients.



13

COGNITIVE PERFORMANCE IN SIX BRAZILIAN MALE WITH OPITZ GBBB SYNDROME AND PATHOGENIC VARIATION IN THE MID1 GENE

RAFACHO MB, Siemann ME¹, Serrao VT², Kokitsu-Nakata NM¹, Almeida MLG¹, Miotto EC², Zechi-Ceide RM¹

1. Department of Clinical Genetics, Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo, Bauru, SP, Brazil (HRAC/USP)

2. Supervisor and PhD of the Training Course in Neuropsychology by the Center for Neurology Studies, Division of Neurological Clinic, Clinical Hospital, University of São Paulo, São Paulo, SP, Brazil (HC-FMUSP)

OBJECTIVE: To evaluate cognitive aspects in six male clinical diagnosis of Opitz GBBB syndrome and pathogenic variation in the MID1 gene.

METHODS: individual age above 18 years with diagnosis of Opitz GBBB performed by clinical geneticist from HRAC-USP and confirmed by presence of a pathogenic variation in MID1 gene were evaluated using instruments that assess general intelligence and specific skills such as memory, visuoperceptive and visuoconstructive functions, executive function and attention. Result of the cranioencephalic MRI or Tomography were considered.

RESULTS: the data found for each assessment of cognitive function showed variables among individuals, however, most functions were within normal limits, although located below the population average. In relation to nervous system, four individual presented Dandy-Walker malformation (DWM) being two of them with the general intelligence classified in the population average and two with borderline intellectual efficiency.

CONCLUSION: this study did not identify intellectual disability in adult men with Opitz GBBB syndrome caused by pathogenic variation in the MID1 gene. However, cognitive functions can be impaired, showing the importance of neuropsychological assessment, specific intervention and imaging correlation for each case, contributing to better management of the patients with this syndrome. The presence of DWM in these cases was not related with the presence of intellectual disability.

Financial support: CAPES; Smile Train



14

EDUCATION IN RIGHTS AS A FUNDAMENTAL RIGHT OF PEOPLE WITH CRANIOFACIAL ANOMALY: THE ROLE OF THE HEALTH PROFESSIONAL

RALA ETL¹, Dutka JCR²

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru;

2. Faculdade de Odontologia de Bauru - FOB/USP, Bauru

OBJECTIVES: Person with craniofacial anomaly (PwCA) can be considered as person with disabilities (PwD). Characterization observes the criteria of the PwD Statute (Law n. 13146/2015). It is a fundamental right of PwD to be educated on rights (EiR) in accordance with items 2e, 4 and 5 of Article 24 of the Convention on Rights of PwD, incorporated with status of Constitutional Amendment into Brazilian law. The health professional (HP) who integrates the multidisciplinary team can be an agent of EiR during the process. Sequelae can activate the attitudinal barriers (AB) to accessing social participation by PwD, which can be mitigated with EiR. This work compared participants' knowledge about legal requirements for characterize PwD as too about their role as agents of EiR.

METHODS: Participants (15) answered questions before and after watching two videos. Responses were collected. Findings analysis was descriptive.

RESULTS: Videos addressed legal requirements for characterization of PwD, indicating long-term impediments that may be associated with craniofacial anomalies. HP can be an agent in disseminating knowledge about the legal characteristics for PwD characterization. It is necessary to implement a public policy for this in specialized centers for the rehabilitation of craniofacial anomalies.

CONCLUSIONS: Participants' knowledge regarding framing of PwCA as PwD was improved. It was understood that even after rehabilitation, PcAC may have sequelae that impair their social participation due to AB. Participants indicated that HD can be vectors of knowledge, in compliance with fundamental right to education in PwD rights, so that PcACs can be recognized as PwD.



15

EVALUATE OF BONE GRAFT AND BONE REGRAFT TO DENTAL IMPLANTS INSTALLATION IN THE CLEFT AREA

GONCALES MG¹, Almeida ALPF²

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru - FOB/USP, Bauru

OBJECTIVE: Evaluate the secondary alveolar bone graft and the indication of bone regrant to dental implants installation in the cleft area.

METHODS: 839 patients received implants. However, just 54 in the cleft area. 19 of them were selected by this study because they presented previously secondary alveolar bone graft. Excluding all of them that the information of bone graft was not found or was tertiary. Tomography measures, getting before dental implants installation, were developed looking for the height and thickness of the alveolar ridge, as the extension of the nasal cavity. The height and extension of the cavity were classified, by coronal slices, in four scores. The top of the bone ridge, apical level of the closest teeth and the bottom line of the nasal cavity were the limits. The thickness was classified in two scores, by axial slices, using the distance anteroposterior of the alveolar ridge of the closest teeth.

RESULTS: 12 patients received autologous alveolar bone graft and seven Bone Morphogenetic Proteins. Six needed bone regrafts. Only two of them achieved the best scores in all of the three classifications, both by the Infuse group. But, at same time, all achieved the best extension of nasal cavity score and none of them the bottom score of height.

CONCLUSION: the indication or not of bone regrant did not influence the installation of dental implants.



16

EVALUATION OF THE TYPES OF SPHENOID SINUS IN PATIENTS WITH CLEFT LIP AND PALATE CONE BEAM COMPUTERIZED TOMOGRAPHY: PARTIAL RESULTS

GRINGO CPO¹, Yaedú RYF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru - FOB/USP, Bauru

OBJECTIVE: to retrospectively evaluate the morphology and pneumatization of the sphenoid sinus in patients with cleft lip and palate (CLP) and compare them to a control group.

METHODS: 50 Cone-Beam Computed Tomography (CBCT) scans of patients with CLP (25 men and 25 women) and 50 CBCT scans of patients without CLP (25 men and 25 women). Classification of the type of sphenoid sinus (conchal, pre-sellar, sellar, post-sellar) and its extensions (body type, lateral, clival, anterior and combined).

RESULTS: the most common type of sphenoid sinus in the FLP group was the post-sellar type (42%), whereas in the control group it was the sellar type (54%). The most common extensions in the FLP group were body type (38%) and combined (34%). In the control group, the most common extensions were body (36%) and lateral (30%).

CONCLUSION: given the anatomical importance of the sphenoid sinus, the characterization of its morphology and pneumatization is very important in the population of patients with cleft lip and palate because these patients are submitted to surgical procedures that manipulate regions close to the sphenoid sinus, therefore, the predictability and knowledge of the The morphology of this sinus guides the surgeon in choosing the appropriate surgical technique and in the management of transoperative complications.

Financial support: Capes



17 EXECUTIVE FUNCTIONS AND COPING IN PEOPLE WITH CLEFT LIP AND PALATE

MOTTA ND¹, Ferreira FR¹, Silva ES¹, Tabaquim MLM¹, Krook MIP^{1,2}, Dutka JCR^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru.

2. Faculdade de Odontologia de Bauru - FOB/USP, Bauru

OBJECTIVE: To describe and compare behavior patterns related to self-concept, executive functions and coping in individuals with unilateral cleft lip and palate.

METHODS: 103 participants, aged between 18 and 25 years, with operated cleft lip and palate without associated syndromes, were divided into 6 groups, considering absence or presence of hypernasality and Dento-Occlusal Index (DOI). The Wisconsin Letter Sorting Questionnaire (WCST) and Ways of Coping Questionnaire (WCQ) were used. Data were submitted to comparative statistics with level of significance at $p < 0.05$.

RESULTS: Findings of the (WCST) indicated performance within and above expected the for Executive Functions for the majority of the participants. The global analysis of the WCQ, revealed no statistically significant differences between the groups, however, it was identified that most participants had average performance. Descriptive analysis of the WCQ regarding the Escape and Avoidance dimension (EAD), revealed that most participants demonstrated Lower ($n=30$) and Average Lower ($n=36$) performance, with participants without hypernasality presenting with greater impairment in this dimension (EAD).

CONCLUSION: The data points towards the good performance of the participants in relation to executive functions, however, it suggests the importance to consider the resilience capacity and its relationship with hypernasality and IDO, mainly regarding the emotional and social aspects, which can influence coping.



18

FOLLOW-UP FOR 6 YEARS TWO TREATMENT PROTOCOLS IN THE PALATE OF CHILDREN WITH OROFACIAL CLEFT

SILVEIRA ABV¹, Ambrosio ECP¹, Jorge PK², Peixoto YCTM¹, Carrara CFC², Machado MAAM¹, Oliveira TM^{1,2}

1. Faculdade de Odontologia de Bauru – FOB/USP, Bauru;

2. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

OBJECTIVE: To compare the palatal development of children with unilateral cleft lip and palate before and after the primary surgeries performed with two treatment protocols.

METHODS: Fifty-six digitized dental casts divided into, Group 1 (G1) – cheiloplasty (Millard technique) at 3 months and one-step palatoplasty (von Langenbeck technique) at 12 months; and Group 2 (G2) – cheiloplasty (Millard technique) and two-step palatoplasty: hard palate closure (Hans Pichler technique) at 3 months and soft palate closure (Sommerlad technique) at 12 months. The sample was evaluated at 3 months of life (Stage 1, S1) and 6 years (Stage 2, S2). The linear measurements were analyzed: intercanine (C–C'), intertuberosity (T–T') distances; anterior palate (I–CC'), anterior intersegment (I–C'), and total palate (I–TT') lengths. The palate area was also measured. Parametric and non-parametric tests were applied ($p < 0.05$).

RESULTS: In G1, the intragroup comparison showed statistically significant smaller I–CC' and I–C' at S2 ($p = 0.001$ and $p < 0.001$, respectively), while T–T', I–TT', and area comparisons were significantly greater ($p < 0.001$, $p = 0.002$, and $p < 0.001$, respectively). In G2, the intragroup comparison exhibited statistically significant smaller C–C' and I–C' at S2 ($p = 0.004$, for both), while T–T', I–TT' and area comparisons were significantly greater ($p < 0.001$, $p = 0.004$, and $p < 0.001$, respectively). At S2 and $\Delta = S2 - S1$, the intergroup analysis revealed that G1 had a statistically significant smaller I–CC' ($p = 0.014$ and $p = 0.043$, respectively).

CONCLUSION: The two-step palatoplasty showed a more favorable prognosis for the palatal growth than one-step palatoplasty in children with orofacial clefts.

Financial support: FAPESP, Processo nº 2021/08730-4.



19

GESTACLEFT: CONSTRUCTION OF A WEBSITE WITH INFORMATION FOR PREGNANT WOMEN OF BABIES WITH OROFACIAL CLEFT

BOM GC¹, Batista NT¹, Mondini CCSD¹, Paccola SAO², Trettene AS¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP

2. Faculdade de Odontologia de Bauru - FOB/USP, Bauru

OBJECTIVE: to develop an educational technology, in the form of a website, regarding guidance for pregnant women with babies with orofacial cleft.

METHODS: methodological study, developed from the Systematic Instructional Design, in the following stages: analysis, design and development, implementation and evaluation. Initially, we sought to know the theme involved from a scope review. The target audience and similarity analysis was carried out. It was also used, knowledge of design and informatics, with specialists of the areas.

RESULTS: the target audience included pregnant women with babies with orofacial cleft, health professionals and informal caregivers. The website was titled "GestaCleft". The logo was built with the idea of care and proximity, through a simple 2D design, whose image shows a 34-week pregnant woman. The initial screen consisted of eight main menus, referring to: definition of fissure, positions that facilitate breastfeeding, oral hygiene, what to do when it is not possible to breastfeed directly and where to seek help. Finally, the website consisted of 18 screens, with resources to facilitate the search for information. Illustrations were used in the form of drawings and photographs, in addition to fonts and colors that conveyed a concept of clarity, lightness, simplicity, calm and comfort.

CONCLUSION: The website built proved to be informative, attractive and didactic. After its validation, it will be made available to the target audience in order to provide information regarding the care of children with orofacial cleft.



20

GESTATIONAL DIABETES MELLITUS AND HIGH-RISK PREGNANCY SUPERVISION IN THE SÃO PAULO STATE DURING 2012 TO 2022

ALVES DE SOUZA L¹, Farina Puntel L¹, Silva Araujo E⁴, Negrato CA³, Freitas Alvarenga K^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

3. Faculdade de Medicina de Bauru – FOB/USP, Bauru

4. Universidade Federal do Rio Grande do Norte – UFRN, Natal

PURPOSE: When considering the Gestational Diabetes Mellitus (GDM) as risk factor for cleft lip and palate, it was proposed to draw an overview and its incidence regarding the attention given to risk pregnant woman, in São Paulo State, on the last 11 years.

METHODS: A descriptive retrospective study, realized with DATASUS data, using Ambulatory Information System from TABWIN software, São Paulo State. The 0244 and 0249 subcategories form the main ICD 024 was used for GDM and ICD Z35, subcategories Z35.3, Z35.5, Z35.6, Z35.8 and Z35.9, for Supervision of high-risk pregnancy.

RESULTS: There was an increase on ambulatory attendance to pregnant woman with GDM, with a lower incidence in 2012 (n=134) and higher in 2021 (n=2751). It was observed an increase on the risk pregnancy (RP), with 3851 and 31914 ambulatory attendances, in 2012 and 2022, respectively. There was a positive correlation of the years with GDM ($p<0.001$, $r=0.936$) and GR ($p<0.001$, $r=0.927$). When comparing the pre (2012 to 2019), peri (2020 to 2021) and post-pandemic (2022), it was seen the period effect on the registration of pregnancy ambulatory attendances to DMG ($p=0.050$) and RP ($p=0.047$). Regarding pre and peri-pandemic period, statistical significance was noticed only for GDM ($p=0.036$).

CONCLUSION: Significant increase was observed on the GDM ambulatory attendances, during the COVID-19 pandemic period, what may be correlated to the sanitary measurements of social distance, affecting the maintenance of healthy habits. To decrease the prevalence of GDM on pregnancy it must be considered a public health priority in SP State.

Financial Support: CAPES



21

HEALTH COMMUNICATION AS AN INSTRUMENT OF PROMOTION, PROTECTION AND RECOVERY OF HEALTH OF THE PERSON WITH CLEFT LIP AND PALATE

CEZAR T¹, Oliveira JL⁴, Tomasevicius Filho E³, Dutka JCR^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

3. Faculdade de Direito – FADUSP – São Paulo

4. Universidade do Estado da Bahia - Salvador

BACKGROUND: The Interministerial Ordinance nº 285/2015 developed by the Health and Education Ministries, establishes the criteria for Certification of Teaching Hospitals (THs) Program, and mentions the objectives of THs such as to implement communication and information regarding healthcare.

PURPOSE: To describe the information about Cleft Lip and Palate available in the website of the THs (established by the Interministerial Ordinance nº 285/2015) which are part of the Health Ministry (HM) Registry of National Healthcare Establishments (RNHE), regulated to offer high-complex care to people with CLP.

METHODS: Searches on websites of the THs were performed to identify whether the THs themselves presented communications regarding CLP healthcare including information about: first care after birth, surgical treatment, treatment protocols.

RESULTS: Results revealed: lack of information about the first care after birth in the majority of websites investigated with only 1 (6%) THs presenting this kind of information; lack of information about specialized surgical treatment needed in CLP in the majority of websites investigated with only 1 (6%) THs presenting this kind of information; lack of information about management protocols for treatment of CLP in the majority of websites investigated with only 1 (6%) THs presenting this kind of information.

CONCLUSION: There is a massive gap regarding communications in healthcare for management of CLP, either for the interested patients or the healthcare professionals in the CLP area.



22

HUMANIZATION IN TIMES OF THE COVID-19 PANDEMIC: A MORE THAN ESSENTIAL RELATIONSHIP

BUSQUETI JVS¹, Braga BMR¹, Bachega MI¹, Almeida ALPF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru;

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVE: The purpose of the study was to analyze the events facing the COVID-19 pandemic at HRAC-USP, identifying the effectiveness of humanization politics.

METHODS: Exploratory and descriptive study with a qualitative approach, carried out at HRAC-USP. Were invited: fifty civil servants from different areas. As inclusion criteria: civil servants selected consecutively without distinction of sex; age; positions assigned to them; at least six months of professional experience at HRAC-USP; have performed activities to the patient from April 2020 to April 2021. As an exclusion criterion: civil servants who do not accept the Informed Consent Form Release and do not answer all questions from electronic form. Data were analyzed using CALEGARI and BARDIN techniques.

RESULTS: 96.2% (48) participants were female and 3.8% (2) were male. Ages ranged from 33 to 68 years. 50% (25) of participants had COVID-19. 57.7% (30) had a fatal victim of the disease in the family or in a close circle. Participants reported that at the beginning of the pandemic they felt insecurities and fears about facing the disease. Humanized practices remained in evidence in face-to-face and remote care.

Conclusion: Humanization remained more than essential for the continuity of rehabilitative treatment during the COVID-19 pandemic.

Financial support: Ministério da Saúde



23

IMPACT OF LOW LEVEL LASER THERAPY ON EARLY OROMIOFACIAL SENSITIVITY RECOVERY AFTER ORTHOGNATHIC SURGERY

ALMEIDA CBP¹, Junqueira ATF¹, Bastos Junior JCC¹, Carvalho RM¹, Yamashita RP¹

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC USP, Bauru/SP

OBJECTIVE: Investigate the effectiveness of low-level laser therapy in early recovery of nerve sensitivity after orthognathic surgery in individuals with repaired cleft lip and palate.

METHOD: The study was conducted in a population of 41 participants blinded and randomized into a control (n=16) and an intervention group (n=27). The experimental group received intervention with low intensity laser therapy, with red light, wavelength of 660nm, power of 100mV and dosage of 4J cm² intraoperatively after exposure of the alveolar nerve and after surgery, in 4 applications at intervals of 12 hours. They underwent the oromiofacial sensitivity test using for that the stesiometer about 2 days before, and, from 3 to 6 months after surgery in the evaluation of the tongue, lips, chin and cheeks areas.

RESULTS: Comparative analysis was applied, with a significance level of 0.05, showing a statistically significant difference in pain level reduction from the EVA scale for the intervention group compared to the control group (I=1.44; C=0.37; p-value=0.013). For the recovery of sensitivity, comparing moments T0 (preoperative) and T3 (3-month postoperative), the control group showed a significant increase in the change for loss of sensitivity (p-value=0.017). For the general analysis of pain after palpation at T0 and T3, the pain improvement rate went from 87.4% to 97.8% after laser therapy intervention.

CONCLUSION: Low-intensity laser therapy applied to the area of inferior and superior alveolar innervation and its mandibular branches was effective in reducing the recovery time of postoperative nerve sensitivity in orthognathic surgery.

Financial support: FAPESP



24

IMPACT OF THE COVID-19 PANDEMIC ON SURGICAL TREATMENT IN PATIENTS WITH CLEFT LIP AND PALATE

FARINA PUNTEL L¹, Almeida DMBM¹, Araújo ES³, Alvarenga KF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

3. Universidade Federal do Rio Grande do Norte - UFRN, Natal

OBJECTIVE: To analyze the impact of the COVID-19 pandemic on labioplasty and palatoplasty procedures in Brazil, since there was cancellation and postponement of both emergent and elective surgeries performed at SUS.

METHOD: This is a retrospective descriptive study carried out with secondary data the Department of Informatics of SUS (DATASUS), Health Information tab (TABNET) of the Hospital Information System (SIH/SUS). Procedures in patients presented with craniofacial and buccomaxillofacial anomaly were considered in codes 0404030106 Primary palatoplasty, 0404030262 Secondary palatoplasty, 0404030122 Secondary labioplasty, 0404030076 Unilateral labioplasty in two stages. The research was delimited to the year periods divided as pre-pandemic (2018-2019), peri (2020-2021) and post-pandemic (2022), by federation unit. Data were submitted to statistical analysis using the Shapiro-Wilk test for data normality analysis, Pearson's correlation coefficient, and one-factor ANOVA (SSPSS, version 24.0), $p \leq 0.05$.

RESULTS: A negative correlation between the years and the total of procedures performed in the country ($p=0.021$, $r=-0.630$), was verified. An effect of the pandemic period was found when comparing the pre, peri- and post-pandemic years, by state, with a significant reduction in the states of Ceará ($p=0.047$) and Sergipe ($p=0.048$) for primary labioplasty, and Piauí ($p=0.045$), for secondary labioplasty. For the primary palatoplasty procedure, there was a reduction in the states of Ceará ($p=0.013$), Minas Gerais ($p=0.002$), Amazonas ($p=0.031$) and in the country average ($p=0.012$), for secondary palatoplasty.

CONCLUSION: There was a significant reduction in the amount of elective surgeries for cleft lip and lip and palate correction, especially for secondary surgeries, during the COVID-19 pandemic.



25

INCIDENCE OF COVID-19 IN ADULT INDIVIDUALS WITH CLEFT LIP AND PALATE ENROLLED AT HRAC-USP

RUIZ SIMÃO L¹, Ferreira dos Santos C^{1,2}, Santiago Jr JF¹, Garcia-Usó M¹, Trindade-Suedam IK^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVE: Considering the coexistence of patients with cleft lip and palate (CLP) and COVID-19, the purpose of this study is to assess the incidence of COVID-19 in adult patients with CLP regularly enrolled at the Hospital for Rehabilitation of Craniofacial Anomalies of the University of São Paulo (HRAC-USP) from 2020 to 2021.

METHODS: The cross-sectional study was carried out at HRAC-USP with individuals whether in active care or not. To measure the data, the researchers applied a structured questionnaire and compared it with data from the Brazilian population.

PARTIAL RESULTS: HRAC-USP patients with COVID-19 were identified based on a questionnaire (n=1323). Using broad case-finding criteria, the incidence was estimated at 37792.89 per 100,000 for CLP individuals. In addition, the feeling of vulnerability to COVID-19 is related to age (n=1320; $\chi^2=14.9$; df=6; p=0.021) and gender (n=1322; p<0.001), however, it does not reflect on social isolation strategies and protocols (n=1271; $\chi^2=3.81$; df=1; p=0.051); elderly people, aged from 60 to 79 years of age, despite representing 5% of the total study population, felt vulnerable to the disease; greater insecurity in this population is expected since age is related to mortality from the virus.

CONCLUSIONS: Our results suggest, until the moment, that patients with CLP have a higher incidence of COVID -19. Even though most individuals did not feel vulnerable to COVID-19, 96.5% of participants claim to have respected social isolation policies.

Financial support: FAPESP



26

INVESTIGATION OF URINARY DISORDERS IN PATIENTS WITH CRANIOFACIAL ABNORMALITIES: A SCOPE REVIEW

SANTOS GX¹, Mazzo A^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: To identify, synthesize and analyze the scientific knowledge produced about urinary disorders in patients with craniofacial anomalies.

METHOD: This is a scope review that follows the proposal of the Joanna Briggs Institute (JBI, 2021). The search strategy followed the modified Prisma tool and used Population, Concept and Context (PCC). Following this definition, the following guiding question was elaborated: "What are the urinary disorders presented by patients with craniofacial anomalies in any context?". Using the Boolean terms or, and and not, the following databases were searched: National Library of Medicine (PubMed/MEDLINE), Scopus, Embase, Web of Science, Scientific Electronic Library Online (SciELO), CINAHL, among the 363 studies found, four were selected for analysis.

RESULTS: The articles were published in Brazil and England; in the years 1992, 2011, 2019 and 2021; in the areas of medicine, nursing, dentistry and genetics. They addressed the relationship between nocturnal enuresis and obstructive sleep apnea and impairments related to EEC syndrome. The urinary disorders mentioned were anuria, dysuria, urinary tract infections and urinary retention. No direct correlations were observed between the presence of craniofacial anomalies and voiding disorders.

CONCLUSION: Although the literature on the subject is restricted to a small number of studies and researchers, the results demonstrate that urinary disorders may be present in these patients and should be observed from the perspective of multidisciplinary care.



27 JUDICIALIZATION INVOLVING DEMANDS FOR TREATMENT OF CRANIOFACIAL ABNORMALITIES: FISSURES AND SYNDROMES WITH ASSOCIATED CLEFTS

COSTA SR¹, Machado MAAM^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

Currently, Judicialization has been the “legal remedy” or “constitutional remedy” to bring solutions to demands involving the health sphere, more precisely Public Health, provided for in articles 196-200 of the 1988 Federal Constitution. Legal remedies are instruments provided for in the Brazilian legal system that guarantee citizens to claim their rights when the State does not fulfill its duty.

OBJECTIVES: This work aims to identify the demands that involve judicialization in the treatment of cleft and syndromic patients with associated clefts, analyzing what are the doubts of the jurists at the time of the sentences, for the execution of an ebook that can help them at the time of your decisions.

METHODS: As sources of research were used: Federal Constitution/88, Master's Dissertation/2020, judicial platforms, articles, literature, HRAC processes (10 years), questionnaire sent to jurists nationwide among judges, prosecutors, defenders and lawyers.

PARTIAL RESULTS: Answers to the questionnaire expected 20, answered - judges (02), prosecutors (04), defenders (41), significant amount added to the 170 processes already analyzed.

PARTIAL CONCLUSION: With the full analysis of each process and the answers to the questionnaire so far, it was possible to conclude that: there is a lack of knowledge on the part of the judiciary regarding the real conditions of hospitals accredited by the SUS for the treatment of clefts and syndromic patients with associated clefts, and the real possibility of complying, or not, with court decisions.

Financial support: CAPES



28

LEGISLATION THAT RECOGNIZE CLP AS A CONDITION THAT CAN CAUSE DISABILITY IN BRAZIL

CEZAR T¹, Regini VBG², Tomasevicius Filho E³, Dutka JCR^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

3. Faculdade de Direito – FADUSP, São Paulo

BACKGROUND: The National Network of Associations of Parents and People with Cleft Lip and Palate (REDE PROFIS) elected, in 2016, its first president with rehabilitated Cleft Lip and Palate (CLP) and established an agenda of goal that included advocating to expand access to adequate treatment aimed for all Brazilian population with CLP. The strategies implemented involved lobbying at the state legislative houses to both, present and approve, legislation that recognizes the Cleft Lip and Palate (CLP) as a condition that can lead to disability if not treated adequately.

PURPOSE: To identify the Brazilian federative units where legislation that recognizes CLP as a condition that causes disability was presented and approved.

METHODS: The websites of the Legislative Assemblies of all Brazilian Federative Units (27) was consulted in search for the existence of bills that were presented and/or approved recognizing CLP as a condition that causes disability.

RESULTS: Findings revealed that 33 % (9) of the Brazilian Federative Units have already presented and approved bills that recognize CLP as a condition that causes disability. The majority of the stated that implemented such legislation 8 out of 9 (89%) implemented the new legislation after 2016.

CONCLUSION: The strategies implemented by REDE PROFIS under the guidance of a president with a history of CLP had a positive impact in the approval of legislation that will lead to better healthcare for the population with CLP.



29

MANUAL FOR PHARYNGEAL BULB MOLDING DURING NASOENDOSCOPY

ANDRADE LKFA¹, Dutka JCR^{1,2}, Pinto MDB¹, Whitaker ME¹, Sousa OMV¹, Lopes MMV¹, Aferri HC¹, Pegoraro-Krook MI^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVE: To develop a manual of guidance for molding of pharyngeal bulb during nasendoscopy for the treatment of velopharyngeal dysfunction.

METHODS: Relevant information about the to pharyngeal bulb molding reported in the literature, as well the one observed in clinical practice was collected. After defining the topics to be observed during molding, examples were separated (on video) of all topics for the preparation of the manual.

RESULTS: The manual was prepared in power point presentation model, in Portuguese (Brazilian) and Spanish, containing objective, clear and concise information, based on scientific evidence and clinical practice aimed at dentists and speech parhologists, who are part of the molding process of the pharyngeal bulb. The manual was entitled "Manual for molding the pharyngeal bulb during nasoendoscopy" and subdivided into topics: "Purpose", "Analysis Form", "Content to be analyzed", "Size of the velopharyngeal gap", "Types of velopharyngeal gap", «Height of the pharyngeal bulb», «Touch of the right lateral wall on the bulb», «Touch of the left lateral wall of the bulb», «Touch of the posterior wall of the bulb», «Touch of the soft palate in the pharyngeal bulb», «Velopharyngeal closure with the bulb» and «References». Illustrations and videos were included in the material.

CONCLUSION: The manual can be a reference material and complement information about molding the pharyngeal bulb during nasoendoscopy, helping the molding process.

Financial support: CAPES e CNPq



30

MASTICATORY FUNCTION IN INDIVIDUALS WITH COMPLETE UNILATERAL CLEFT LIP AND PALATE SUBMITTED TO BIMAXILLARY ORTHOGNATHIC SURGERY: PRELIMINARY RESULTS

BUENO PM¹, Medeiros LH¹, Fidelis Da Silva LV¹, Trindade PAK², Trindade-Suedam IK³

1. PhD student, Postgraduate Program in Rehabilitation Sciences, Laboratory of Physiology, Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo, HRAC-USP

2. Oral and Maxillofacial Surgeon, Orthognathic Surgery, Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo, HRAC-USP

3. Associate Professor, Department of Biological Sciences, FOB-USP and Laboratory of Physiology, HRAC-USP.

OBJECTIVE: To assess the masticatory function of individuals with complete unilateral cleft lip and palate (UCLP) submitted to orthognathic surgery.

METHOD: Four patients with UCLP (2?, 2?, 22y±2) who underwent bimaxillary orthognathic surgery between were included in this sample. Masticatory function was evaluated using bite force (BF) assessment, in the molar region, using a gnathodynamometer (IDDK Kratos), and, evaluation of masticatory performance (VOH=variance of hue) with a "colourmixing ability test" (ViewGum©) using a two-color gum. All assessments were performed in the pre (PRE) and 6 months postoperative period (PO6M).

RESULTS: In the BF assessment, men had a greater BF (PRE=46,9±5,9KgF; PO6M=31,3±4,8KgF; Reference values: 44,4±15,6KgF) than women (PRE=17,3±5,7KgF; PO6M=26,5±2,04KgF; Reference values= 43,72±8,78KgF) in both periods. Women showed an increase in BF in the PO6M, whereas men had a decrease in the same period of analysis. The reasons for this result are still to be explained. In the "colourmixing ability test", women presented a PRE=0,17±0,03VOH; PO6M=0,18±0,015VOH and men PRE= 0.09±0,006VOH; PO6M=0,13±0,04VOH (Reference values:0,03±0,02VOH). This result indicates an adequate masticatory performance on both periods.

CONCLUSION: Cleft lip and palate seems to impact some of the functional parameters of the masticatory system, but a broader analysis with a larger sample is necessary to confirm these results. It is expected that the BF will increase in the later postoperative periods, such as PO12M, also to be assessed, and that the masticatory efficiency will remain stable.

Financial support: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES).



31

MIDDLE EAR AND HEARING IN CLEFT LIP AND PALATE: LONG TERM OUTCOMES

SOUZA AG¹, Antoneli MZ¹, Dutka JCR^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru - FOB/USP, Bauru

AIM: Describe hearing sensitivity and middle ear status within a ten-year period in patients with cleft lip and palate (CLP).

METHODS: Retrospective transversal study involving 462 medical charts, including patients with nonsyndromic CLP treated by one specialized cleft center. Data regarding previous ENT evaluations and audiologic assessments were obtained.

RESULTS: ENT evaluations showed that most otoscopic abnormalities occurred until age six. Opacification and retraction of the tympanic membrane were the most frequent findings. From age seven and above most ears showed normal otoscopic findings. Tympanometric finding revealed Type B curve for most ears until age six. From age seven and above Type A curve was the most frequent finding. Audiometric findings revealed average hearing thresholds within normal limits for most patients in all ages. When abnormal, audiometric findings revealed mild conductive hearing loss.

CONCLUSION: A negative correlation was observed between middle ear abnormalities, hearing loss and age. These findings indicate that hearing sensitivity and middle ear status improve as age increases in patients with cleft lip and palate.



32 MOLLUSCUM CONTAGIOSUM VIRUS ENDOGENOUS VIRAL ELEMENTS FOUND IN HUMAN GENETIC SEQUENCES ASSOCIATED WITH OROFACIAL CLEFTS

MESSIAS TS¹, Silva KCP², Soares S³

1. Hospital de Reabilitação de Anomalias Craniofaciais-USP, Bauru

2. Universidade Nove de Julho – UNINOVE, Bauru

3. Faculdade de Odontologia de Bauru - FOB/USP, Bauru

OBJECTIVE: To investigate whether there is a coevolutionary history between the species *Molluscum contagiosum virus* (MCV) and human genetic sequences related to Orofacial Clefts (OC).

METHODS: The method of Katzourakis A et al, PLoS Genet, 2010 was adapted for the investigation of Endogenous Viral Elements (EVEs) in human genetic sequences related to OC. The BLAST software algorithm package (Altschul SF et al, NAR, 1997) was used for the in silico experiments, while the temporal results of human speciation from Pääbo S, Nature, 2003 were the basis for our temporal estimates of fixation of the evidenced EVEs.

RESULTS: Four EVEs were evidenced, two fixed in the human genome in the period before 16 million years and two integrated in a period below 6 million years.

CONCLUSION: We inferred an indirect coevolutionary history of associating MCV (and/or its viral ancestors) with OC. The existence of an associate history raises new unknowns regarding the etiology of OC, therefore, this result can support studies on the current situation of this relationship and the main question, does this association still exist?

Financial support: CAPES



33

NASAL PATENCY AFTER ORTHOGNATHIC SURGERY IN INDIVIDUALS WITH CLEFT LIP AND PALATE: A REVIEW OF 523 CASES AT A TERTIARY HOSPITAL IN BRAZIL

SEIXAS DR^{1,2}, Maia SES², Yamashita RP², Silva ASC², Araújo BMAM², Fukushima AP^{1,2}

1. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

2. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

OBJECTIVE: To evaluate nasal patency after orthognathic surgery (OS) in cases operated on in the last 20 years at a tertiary hospital.

METHODS: After approval by the institution's ethics committee (n 4,872,900), a retrospective study was carried out with an analysis of the pre- and post-OS anterior rhinomanometry (AR) outcomes, by means of pressure-flow technique. The sample included 523 adult patients with repaired cleft lip and palate (CLP), non-syndromic, with OS performed between the years 2000 and 2019. Patients were separated into two groups, according to the surgical period: 1st decade (n=243) and 2nd decade (n=280). Data were evaluated by Jamovi software (version 2.2) by the ANOVA Repeated Measures Test, considering a p-value of <0.05.

RESULTS: Nasal cross-sectional area (CSA) of the overall sample showed a significant increase ($p<.001$) between pre ($0.571\pm0.183\text{ cm}^2$) and post-OS ($0.653\pm0.181\text{ cm}^2$). In both decades, a significant intragroup difference was observed in the pre and post-OS nasal CSA ($p<.001$). However, the 2nd decade showed significantly higher values in the pre ($0.596\pm0.192\text{ cm}^2$) and post ($0.674\pm0.187\text{ cm}^2$) compared to the 1st decade, which exhibited an average pre CSA of $0.541\pm0.168\text{ cm}^2$ and post of $0.629\pm0.171\text{ cm}^2$ ($p<.001$). Despite this, the two examined groups' CSA increases were approximately of the same proportion ($p=0.153$).

CONCLUSIONS: After analyzing the institution's performance over two decades, it was found that patients have shown improved nasal patency conditions over time, a possible result of the institution's continued commitment to improving its protocols, based on a multidisciplinary rehabilitation program.



34

NASOPHARYNGEAL MORPHOMETRY IN ADULTS WITH CLEFT LIP/ PALATE AND OBSTRUCTIVE SLEEP APNEA: ANALYSIS BY CONE BEAM COMPUTED TOMOGRAPHY AND 3D RECONSTRUCTION

DAQUINO A¹, Rodrigues MN¹, Loureiro NB¹, Trindade-Suedam IK^{1,2}, Trindade SHK¹

1. Hospital de Reabilitação de Anomalias Craniofaciais-USP, Bauru - Setor de Fisiologia e Unidade de Estudos do Sono

2. Faculdade de Odontologia de Bauru - FOB/USP, Bauru

AIM: To perform nasopharyngeal airway (NPA) morphometry of adults with cleft lip/palate (CL/P); verifying its correlation with obstructive sleep apnea (OSA) severity, and comparing the findings to those with CL/P without OSA (N-OSA) and with OSA without craniofacial anomalies (N-CL/P). Study design: Cross-sectional, retrospective.

SETTINGS: Tertiary hospital.

METHODS: Three groups were enrolled: G1) CL/P OSA (n=6, 3♂, 38.70±10.20years); G2) CL/P N-OSA (n=11, 8♂, 24.80±3.00years); G3) N-CL/P OSA (n=13, 4♂, 50.40±9.70years). CBCT images were used for 3D reconstruction and morphometric analysis. Clinical data were collected from medical charts. Descriptive and inferential statistical analyses were performed.

RESULTS: Volume of NPA (8624±2744mm³) was larger in G1 than in G3 (6294±1645)(p=0.03). Length (1.79±0.51cm), inferior (3.24±0.44cm) and superior (1.33±0.18cm) width, inferior depth (2.77±0.41cm), inferior (4.86±1.18cm²) and superior (4.79±1.47cm²) areas, and inferior perimeter (1.01±0.14cm) of NPA on G1 did not differ from G2 or G3. Superior perimeter (1.33±0.18cm) of G1 NPA differed significantly from G3 (p=0.01). Severity of OSA did not differ between G1 (median=8.90 apnea-hypopnea index events/h) and G3 (median=15.50 oxygen desaturation index events/h). However, G1 and G3, present mild and severe OSA, respectively. Morphological variables and OSA severity did not correlate at the statistical level of significance.

CONCLUSIONS: Despite differences among groups regarding NPA, no morphological characteristics correlated with OSA severity.

Financial support: CNPq, USP



35

NON-SYNDROMIC CLEFT PALATE: PATTERN OF FAMILY OCCURRENCE

SILVA CM¹, das Neves LT^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVE: This study aimed to verify the prevalence of positive family history for clefts among subjects with non-syndromic cleft palate (NSCP) and describe what was the degree of kinship and what was the type of cleft in the family member also affected by the anomaly.

METHODS: A retrospective study was carried out, based on the analysis of secondary data sources. A survey was carried out by the Data Processing Center of the Hospital for Rehabilitation of Craniofacial Anomalies (DPC-HRAC), of all subjects registered with NSCP.

RESULTS: A total of 9,069 medical records of subjects with NSCP were located, of which 670 were randomly selected and analyzed. In this sample, the family history was positive in 153 subjects (23%). The most frequent degree of kinship was the first degree (52%), and the type of cleft most commonly found in the affected relative was the cleft palate, present in 83% of the individuals.

CONCLUSION: In cases of NSCP, usually, the affected relatives are the parents or siblings. Furthermore, it was possible to infer that this type of cleft presents a pattern of recurrence, since more than 80% of subjects with a positive family history had another relative with this same type of cleft. So, we concluded that family history, number of relatives also affected and the pattern of occurrence are important risk factors to be investigated and considered in the etiology of NSCP.

Financial support: CAPES



36

OUTCOMES OF ALVEOLAR GRAFT ASSOCIATED WITH PREMAXILLARY OSTEOTOMY PERFORMED WITH RHBMP-2 VERSUS ILIAC BONE

RESENDE LEAL C¹, Rocha LA¹, Carvalho RM¹, Faco RAS¹, Alonso N¹, Ozawa TO¹, Tonello C¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru.

OBJECTIVE: To evaluate the influence of filling material and timing of surgery on radiographic outcomes of alveolar grafting with premaxillary osteotomy. The null hypothesis was that outcomes would be similar with both rhBMP-2 (rhBMP-2G) and cancellous bone from the iliac crest (IG), regardless of the timing of surgery.

METHODS: Twenty-eight patients with complete bilateral cleft lip and palate and mean age of 13 years were consecutively selected for this cross-sectional study. The individuals underwent bilateral alveolar grafting associated with premaxillary osteotomy (AG+ PO) with rhBMP-2 or cancellous bone from the iliac crest in a single center. Experienced maxillofacial surgeons used the same surgical technique in both groups. Periapical or occlusal radiographs were taken 12 months after surgery. AG+PO were assigned as success or failure by 3 blinded raters based on the modified Bergland and SWAG scales. The influence of filling materials and timing of surgery on outcomes was verified by Fisher's exact test and Chi-square test ($P < 0.05$).

RESULTS: There was no significance variation between the mean ages of participants in the rhBMP-2G and IG ($P=0.471$). Scales showed almost perfect reliability (agreement rate=96.4%; $K=0.85$). rhBMP-2G and IG had similar success rates with modified Bergland scale (85.7% and 82.1%) and SWAG scale (92.9% and 82.1%), respectively. However, only the modified Bergland scale found an influence of age on radiographic outcomes ($P=0.025$).

CONCLUSION: AG+PO performed with rhBMP-2 and iliac crest bone showed similar success rates, regardless of the timing of surgery.

Financial support: CAPES



37 PERCEPTION OF HEALTH PROFESSIONALS WORKING IN A TERTIARY HOSPITAL REGARDING THE PATIENT SAFETY CLIMATE

CARVALHO PVS¹, Gazola M¹, Matiole CR¹, Trettene AS¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

OBJECTIVE: to evaluate the perception of the patient safety climate by health professionals working in a tertiary hospital.

METHODS: observational, cross-sectional study, developed in a Brazilian public and tertiary hospital, specialized in the care of patients with craniofacial anomalies and related syndromes. Nurses, technicians and nursing assistants, physicians, physiotherapists, speech therapists, social workers, biologists, biomedical professionals, pharmacists, pharmacy assistants, dentists, dental assistants, imaging technicians, nutritionists, psychologists, educational psychologists, occupational and recreational therapists, who work in the institution for a period longer than six months, with a minimum working day of 20 hours per week. Professionals who were on medical leave or on leave, who did not answer the questionnaire after three approaches or who filled it out inappropriately were excluded. For data collection, the Safety Attitudes Questionnaire was used, which is composed of two distinct parts: characterization of the participants and referring to patient safety. Descriptive statistical analysis was used.

RESULTS: 235 professionals participated, whose average age was 44 years (sd= 12.9). The score referring to the patient's safety climate as a whole was on average 72.10 (sd=10.81), that is, the perception was negative. Among the six domains, the most negative was "management perception" (mean 60.18; sd=22.78), while the best evaluated referred to "job satisfaction" (mean 77.43; sd=22.78). =17.07).

CONCLUSION: although close to values that reflect a positive perception, the assessment of the safety climate was negative. The findings point to areas to be improved to promote patient safety in its entirety.



38

PERCEPTION OF THE NURSING TEAM AT A REHABILITATION HOSPITAL FOR CRANIOFACIAL ANOMALIES REGARDING PATIENT SAFETY

MATIOLE CR¹, Manso MMFG¹, Bom GC¹, Carvalho PVS¹, Trettene AS¹

1- Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

OBJECTIVE: to analyze the perception of the patient safety culture according to the nursing team of a public and tertiary hospital, specialized in the care of patients with craniofacial anomalies and related syndromes.

METHODS: descriptive and cross-sectional study, developed at the Hospital de Reabilitação de Anomalias Craniofacial, in Brazil, between July and September 2020, through the application of the Hospital Survey on Patient Safety Culture. Nursing professionals working in the hospital for more than six months were included, regardless of the sector where they worked, with a minimum weekly workload of 20 hours. Professionals who were absent during the data collection period, regardless of the reason, were excluded. Inductive statistical analysis was used, with a significance level of 5%.

RESULTS: 81 professionals participated. The overall average percentage of positive responses, referring to the dimensions of patient safety culture, was 69.28%. The dimensions of patient safety culture considered as strong areas included: expectations and actions regarding their supervisor/boss and actions promoting patient safety (83.95%); teamwork within the units (80.86%); management support for patient safety (79.01%) and organizational learning (76.95%). On the other hand, the non-punitive responses to errors dimension was considered a fragile area, with a response percentage of 42.39%.

CONCLUSION: The patient safety culture according to nursing professionals was satisfactory. However, there are areas to be strengthened and challenges to be overcome, including the identification and reporting of adverse events and appreciation of the just culture.



39

PHARYNGEAL BULB REDUCTION PROGRAM IN INDIVIDUALS WITH CLEFT PALATE

PEGORARO-KROOK MI^{1,2}, Aferri HC¹, De Souza OMV², Lopes MMW¹, Whitaker ME¹, Pinto MDB¹, Marino VCC³, de Andrade LKF¹, Draghi LA², Fukushima AP^{1,2}, Dutka JCR^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru - FOB/USP, Bauru

3. Faculdade de Filosofia e Ciências - UNESP/SP, Marília

OBJECTIVES: Verify the effect of a pharyngeal bulb reduction program (PBRP) on the speech resonance, velopharyngeal structures and function, and pharyngeal bulb configuration of individuals with cleft palate.

METHODS: 10 patients (both genders) with operated cleft palate who underwent prosthetic treatment of velopharyngeal insufficiency participated in this study. The two-week-program consisted of bulb reductions under nasoendoscopic view and intensive speech therapy sessions after each reduction. Patients underwent perceptual evaluation of hypernasality, nasometry, flow-pressure technique, as well as linear measurements of the bulb, pre and post-PBRP.

PARTIAL RESULTS: All patients had 1 to 2 reductions of the bulb size during the PBRP. After the end of the second week they (100%) had a significant reduction size of the bulb, as well as in the velopharyngeal gap. The description of the PBRP and the results of speech resonance, velopharyngeal structures movement, and pharyngeal bulb configuration after the program will be presented and discussed.

CONCLUSIONS: The proposed PBRP has proved to be efficient in stimulating the movement of velopharyngeal structures and reducing the size of the velopharyngeal gap, making the patient candidate for secondary surgery with good prognosis for speech. Normal speech resonance can be achieved with a smaller bulb after a PBRP.

Financial support: FAPESP e CNPq



40

PHARYNGEAL BULB REDUCTION PROGRAM IN INDIVIDUALS WITH CLEFT PALATE: LINEAR MEASUREMENTS

AFERRI HC¹, Souza OMS¹, Lopes MMW¹, Siecola MW¹, Pinto MDB¹, Dutka JCR^{1,2}, Pegoraro-Krook MI^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: a) To describe a pharyngeal bulb reduction (PRB) program to reduce the size of the velopharyngeal gap in individuals with operated cleft palate; b) Verify the effect of PRB on the configuration of the pharyngeal bulb.

MATERIAL AND METHODS: The casuistry consisted of 10 patients of both sexes, with operated cleft palate or congenital cleft lip and palate, who underwent prosthetic treatment of velopharyngeal insufficiency as a result of having a hypodynamic velopharynx. The patients were submitted to a program to reduce the pharyngeal bulb dimensions in its width and length during nasoendoscopy, the speech results present before the reductions were maintained with intensive speech therapy sessions. Linear measurements of width and length were performed before and after each reduction to measure changes in the configuration of the pharyngeal bulb.

RESULTS: All patients had 1 to 3 reductions of the pharyngeal bulb during the two-week period of the bulb reduction program. After the last reduction, all patients significantly reduced the dimensions of width and length of the pharyngeal bulb. The reduction of the bulb promoted an improvement in the mobility of the velopharyngeal mechanism, reversing the hypodynamic velopharyngeal condition.

CONCLUSIONS: The pharyngeal bulb reduction program, associated with intensive speech therapy, was effective in reducing the dimensions of width and length of the pharyngeal bulb and in stimulating the improvement of pharyngeal wall movements, reversing the velopharyngeal hypodynamism.

Financial support: FAPESP



41

PHONOAUDIOLOGICAL ASSESSMENT IN PATIENTS AFTER PALATOPLASTY AND CLINICAL CORRELATION

MOURA LB¹, Antoneli MZ¹, Santos ACA¹, Ruiz DMCF¹, Alonso N²

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP

2. Hospital das Clínicas da Faculdade de Medicina da Universidade São Paulo - FMUSP

INTRODUCTION: Speech disorders related to cleft lip and palate. Factors affecting the results are the palatoplasty technique used, the surgeon's experience and the anthropometric measurements of the palate.

AIMS: To correlate speech results with the surgical technique used and anthropometric measurements performed intraoperatively in patients diagnosed with cleft lip-palate.

STUDY DESIGN: Longitudinal, retrospective. Location: Hospital das Clínicas, Faculty of Medicine, University of São Paulo.

METHOD: Patients who underwent primary palatoplasty after 2015 and who still attend the Craniomaxillofacial Surgery Outpatient Clinic. Those patients who underwent primary palatoplasty after 2018 had the length measurements from the palate, cleft and uvula to the posterior pharyngeal wall, before and immediately after palatoplasty, recorded.

RESULTS: So far, we analyzed twenty-four patients. Of these, 19 were male and 5 were female with a mean age of 20.4 months. The most frequent type was one-sided transforamen cleft. All patients had their speeches evaluated as balanced. One patient was observed with hyponasality, two with obligatory disorders and three with compensatory articulation. Velopharyngeal insufficiency was not diagnosed in the sample. Postoperatively, there was an increase in the length of the palate with an average of 5.4 to 5.6 cm and a decrease in the distance from the uvula to the first vertebra, with an average of 1.8 to 1.2 cm.

CONCLUSION: Patients analyzed did not have significant alterations in the speech assessment. Furthermore, no patient had velopharyngeal insufficiency.



42

PRE- AND POST-SURGICAL ORTHOPEDICS ON DENTAL ARCHES OF CHILDREN WITH CLEFT LIP AND PALATE: COMPARISON BETWEEN PROTOCOLS AT THE FIRST YEAR OF LIFE

MELLO-PEIXOTO YCT¹, Ambrosio ECP¹, Cerón-Zapata AM², López-Palacio AM², Jorge PK³,
Silveira ABV¹, Carrara CFC³, Machado MAAM¹, Oliveira TM^{1,3}

1. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

2. Universidad CES, Medellín, Colombia

3. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

OBJECTIVE: To evaluate the effects of treatment protocols on the dental arches of children with unilateral cleft lip and palate treated with or without pre- and post-surgical orthopedics (PPSO).

METHODS: Ninety-six dental models divided into: Group 1, G1 – Hotz plate; Group 2, G2 – nasoalveolar moulding plate; and Group 3, G3 – without PPSO. The participants were evaluated before (Time 1, T1) and after (Time 2, T2) cheiloplasty. Linear measurements, areas and angles were analyzed. Paired t test, ANOVA/ Tukey test, and Pearson correlation were used ($\alpha=5\%$).

RESULTS: G1 showed a significant reduction of the following parameters C-C', C Area, and $\angle C'T'T$ ($p=.001$, $p<.001$, and $p=.044$, respectively). However, G1 exhibited growth in the following dimensions T-T', I-T, I-C, and S Area ($p=.015$, $p=.027$, $p=.048$ and, $p<.001$, in this order). In G2, C-C' and the angles $\angle CTT'$ and $\angle C'T'T$ decreased ($p<.001$, $p=.008$ and $p=.002$, respectively) at T2, while T-T' and S Area increased ($p=.004$ and $p<.001$, in this order) in this same period. In G3, C-C', I-C', C Area, and $\angle GCT$ reduced ($p=.002$, $p<.001$, $p<.001$, and $p<.001$, respectively) at T2, but T-T', I-T, I-C, and S Area increased ($p=.008$, $p=.040$, $p<.001$, and $p=.001$, respectively) in the same period. Intergroup analyzes of the growth changes showed that G3 had a smaller growth for S Area ($p=.013$), C Area ($p=.012$), and $\angle GCT$ ($p=.002$) than G1 and G2.

CONCLUSIONS: Pre- and post-surgical orthopedics reduced the residual effects produced by the healing tension of the lip on the dental arch, mainly in the anterior area of the palate.

Financial support: CNPq e FAPESP, Processo nº 2020/16690-0.



43

PREVALENCE OF OBSTRUCTIVE SLEEP APNEA IN CHILDREN WITH ROBIN SEQUENCE AND OPERATED CLEFT PALATE: POLYSOMNOGRAPHIC EVALUATION

BANHARA FL¹, Sena LMF², Trindade-Suedam IK^{1,2}, Trindade SHK^{1,2}, Trindade IEK^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

OBJECTIVE: To analyze the prevalence of OSA and nasal obstruction (NO) in children aged 6 to 12 years with NSRS as compared to children with NSCP.

METHOD: A prospective cross-sectional and analytical study was developed in a reference center. Anthropometric assessment, structured clinical interview and type IV polysomnography (Biologix™) were performed in 22 children with NSRS and 15 children with NSCP. The instruments used for analysis were: 1) "Sleep Disturbance Scale for Children" (SDSC) for assessing sleep-disordered breathing (SDB), including OSA, and excessive daytime sleepiness (EDS), and 2) "Congestion Quantifier Five-Item Test" (CQ5) for evaluating NO symptoms. Descriptive statistical analysis was performed to evaluate data.

RESULTS: Positive SDSC scores in the SDB subscale were observed in 59.6% of the NSRS children and 43.6% of the CP children. EDS was observed in 28.8% and 9.1%, respectively. Positive CQ5 scores for NO symptoms were observed in 17.3% of the NSRS children and 16.4% of the CP children. Oxygen desaturation indexes (ODI) indicating mild and moderate sleep apnea were observed in 80.9% and 56.25% of the NSRS and the CP groups, respectively. Severe OSA occurred in only one child of each subgroup. Results showed that NSRS dentoskeletal and midface alterations were associated with a higher occurrence of OSA.

CONCLUSION: Data suggest that children with Robin Sequence are at high risk for OSA.



44

PROFILE OF PATIENTS REGISTERED AT HRAC-USP RESIDENTS IN THE NORTHERN COAST OF SÃO PAULO STATE AND IMPACT ON THE TREATMENT DUE TO COVID-19 PANDEMIC

SAMERSLA MOP¹, Santos CF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: To map the clinical/socioeconomic profile of residents of the Northern coast of São Paulo State (LN): Caraguatatuba, Ilhabela, São Sebastião and Ubatuba, with medical records at the Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo (HRAC-USP). To investigate if there was an impact on treatments due to the pandemic of COVID-19.

METHODS: Descriptive and quantitative study structured as follows: analysis of secondary sources in the Data Bank of the Medical Chart Section and analysis of data from the procedure scheduling spreadsheets at HRAC-USP.

SAMPLE: 105 patients in follow-up at the HRAC-USP residing in the LN municipalities. Project approved by Institutional Review Board of HRAC-USP, CAAE nº 53275221.5.0000.5441.

CONCLUSIONS: The profile of the LN patients in HRAC-USP is male, with a mean age of 21 years. Ubatuba and Caraguatatuba concentrate the highest number of patients under treatment in HRAC-USP. São Sebastião expressed the highest average of surgical/outpatient procedures (5.9 procedures/patient). Until 05/22/2022, 429 surgical/outpatient procedures were performed in the LN patients. The predominant CLP was transforamen clefts. 35% of patients had new case consultation ranging from zero to three months. The upper low socioeconomic classification was predominant. 71% depended on municipal health transportation. In 2019 there was the highest percentage of procedures in the HRAC-USP (71%); in 2020 this percentage was 44%. It is concluded that there is a significant association between the variables and analysis of adjusted and corrected residuals; therefore, there was an impact on care due to the pandemic.



45

RARE NONSYNDROMIC CRANIOFACIAL CLEFTS IN 80 BRAZILIAN INDIVIDUALS: CLINICAL AND ETIOLOGICAL ASPECTS

VIRMOND L¹, Kokitsu-Nakata NM¹, Serigatto HR¹, Moura PP¹, Vendramini-Pittoli S¹, Tonello C^{1,2}, Zechi-Ceide RM¹

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Curso de Medicina da Universidade de São Paulo - FOB/USP, Bauru

OBJECTIVE: To describe and classify the clefts of individuals with rare nonsyndromic craniofacial clefts.

METHODS: A retrospective study carried out at the Hospital of Rehabilitation of Craniofacial Anomalies (HRAC/USP), approved by the Ethical Committee. Patients with rare craniofacial clefts, without other congenital anomalies or clinically recognizable syndromes, registered in the Department of Clinical Genetics, were included. The rare craniofacial clefts were classified according to Tessier's classification (Tessier P, J Maxillofac Surg, 1976) and secondary data, including medical records and photographs, were analyzed. Clinical and genetics aspects were considered.

RESULTS: Eighty patients were included, 52 females and 28 males. Gestational intercurrents included bleeding in 5 cases (6,2%), rubella in 1 (1,2%), teratogenic exposure in 3 (3,7%), and gestational diabetes in 2 (2,5%). Thirty-eight individuals (47,5%) had more than one rare cleft, and 27 (33,7%) had bilateral involvement. All of Tessier rare clefts were observed, except the Tessier number 14. The most frequent clefts were Tessier number 4, 0, 3, and 7 while the rarest were Tessier number 9, 12, and 13 clefts. Genetic testing performed in 21 patients showed no alterations. Familial recurrence was observed in two cases (2,5%).

CONCLUSION: The female predominance, gestational intercurrents, and familial recurrence reinforce the multifactorial inheritance hypothesis. The familial recurrence indicates an influence of genetic factors in rare craniofacial clefts etiology. Tessier number 14 cleft was not observed, probably due to its frequent association with Tessier number 0 cleft in syndromic cases.



46

RELATIONSHIP BETWEEN SURGICAL SKELETAL MOVEMENT AND UPPER AIRWAY CHANGES IN PATIENTS WITH CLEFT LIP AND PALATE

CARVALHO LRA¹, Silveira ITT², Duarte BG¹, Gomes JPF¹, Yaedú RYF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVE: To evaluate the three-dimensional alterations of the Upper Airways (UA) in patients with unilateral Cleft Lip and Palate (CLP) after orthognathic surgery.

METHODS: Cone-beam computed tomography scans of 23 patients (16 males and 7 females) with non-syndromic unilateral CLP who underwent bimaxillary surgery (Le Fort I and bilateral sagittal osteotomy of the mandible) with or without genioplasty for correction of class III skeletal malocclusion performed from 2013 to 2021 at HRAC-USP were analyzed. The UA volume (V), the minimum cross-sectional area of the pharynx (mCSA) and craniofacial measurements were performed using NemoCeph and Dolphin software in 3 stages: pre-surgery (T0), post-surgery of a maximum of 3 days (T1) and post-surgery period of at least 12 months.

PARTIAL RESULTS: V (cm³) and ASm (mm²) showed a reduction in T1 (mean of 15.84; SD 5.50 / mean of 151.29; SD 67.59) in relation to T0 (mean of 16.00; SD 8.05 / mean 168.53; SD 117.95) and reduction at T2 (mean 13.60; SD 6.08 / mean 113.62; SD 73.54) when compared to T0 and T1.

CONCLUSION: Bimaxillary surgery for correction of class III skeletal malocclusion (maxillary advancement and mandibular setback) seems to cause a decrease in the dimensions of the UA, which can be accentuated after 12 months.

Financial support: CAPES



47

SELF-PERCEPTION OF BODY IMAGE IN CHILDREN WITH OROFACIAL CLEFT

MILLENA DE OLIVEIRA T¹, Silva VKC¹, Menegatti CL¹, Ivatiuk AL²

1. Pontifícia Universidade Católica do Paraná

2. Clínica particular

The objective of the study was to verify the self-perception of body image in children aged 9 to 12 years old with orofacial cleft using the Human Figure Drawing. Orofacial cleft is a congenital malformation that affects the tissue of the lip and/or palate. There is scarce literature on the psychological impacts on the child with this condition. The study was approved by CAAE: 57053321.6.0000.0020 and six children between 9 and 12 years old participated. For data collection, an Informed Consent Form was presented to the guardians and a Term of Consent to the children. For data collection, we used drawing materials with the slogan: "On this sheet of paper you will draw yourself the way you want. Make it as beautiful as you can and take your time." A 6-question survey was applied about the drawing. No drawing directly showed features of FO, but distortions of the drawing of the face or covered parts. No participant spoke openly about their FO, only lived experiences of their self-image. We conclude that the non direct inclusion of the FO in some participants' drawings revealed avoidance of contact with this condition, while other participants revealed perceiving their self-image without FO, denoting different adaptations of self-image in the analyzed group.



48

SLEEP-DISORDERED BREATHING IN INDIVIDUALS WITH TREACHER COLLINS SYNDROME: CLINICAL AND POLYSOMNOGRAPHIC ANALYSIS

FIDÉLIS DA SILVA LV¹, Medeiros LH¹, Bueno PM¹, Trindade SHK², Trindade-Suedam IK³

1. PhD student, Postgraduate Program in Rehabilitation Sciences, Laboratory of Physiology, Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo, HRAC-USP
2. Professor, Medical Course, FOB-USP and Laboratory of Physiology, HRAC-USP
3. Associate Professor, Department of Biological Sciences, FOB-USP and Laboratory of Physiology, HRAC-USP

OBJECTIVE: To assess the occurrence of Sleep-disordered breathing (SDB) in individuals with TCS.

METHODS: Twenty adult individuals were evaluated using Berlin questionnaire, Epworth Sleepiness Scale, Respiratory Symptoms Questionnaire and SF36 (quality of life). Anthropometric data (Body Mass Index-BMI, Cervical Circumference-CC and Abdominal Circumference-AC) and demographic data (age, gender, blood pressure and previous surgery on the airways/craniofacial skeleton). In a subgroup (n=9), SDB was evaluated by nocturnal type I polysomnography (PSG).

RESULTS: A high occurrence of mild obstructive sleep apnea OSA (44%) was observed on PSG exams. Apnea Hypopnea Index corresponded to 11.8 ± 22 events/hour (maximum = 77, 5 events/h). The mean REM AHI was 16 ± 32 events/h while the mean apnea duration was 41 ± 18 s (maximum duration = 78s) and SatO₂ was $96.2 \pm 3.6\%$ (minimum = 58%). Anthropometric data such as BMI (22.9 ± 5.9) (reference value ≤ 24.9), CC (34.1 ± 4.3 cm) (reference value ≤ 36 cm, < 40 cm) and AC (80.4 ± 13.6 cm) (reference value ≤ 80 cm, ≤ 94 cm). On the sleep questionnaires, it was detected that 35% of the individuals were at risk for OSA, 75% had chronic respiratory complaints such as snoring, 20% of had excessive daytime sleepiness. Regardless of these findings, a good quality of life was observed. Strong positive correlations were found between CC, AC, BMI versus AHI and strong negative correlations between CC, AC, BMI versus SatO₂.

CONCLUSION: OSA is a highly prevalent condition in adults with TCS. Due to the low occurrence of predisposing factors for OSA, it seems that this high prevalence is due to the craniofacial dysmorphology imposed by the syndrome.

Financial support: CAPES



49

THE ECTOPIC NASAL BONE: A HALLMARK OF THE OCULOauriculofrontonasal SYNDROME

SERIGATTO HR¹, Kokitsu-Nakata NM¹, Moura PP¹, Vendramini-Pittoli S¹, Tonello C^{1,2}, Zechi-Ceide RM¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru;

2. Curso de Medicina da Universidade de São Paulo - FOB/USP, Bauru

OBJECTIVES: to verify the presence of the ectopic nasal bone in individuals with the clinical diagnosis of oculoauriculofrontonasal syndrome (OAFNS; OMIM 601452).

METHODS: This is part of a retrospective study carried out at the Hospital of Rehabilitation of Craniofacial Anomalies (HRAC/USP), approved by the Ethics Committee of HRAC/USP. The inclusion criteria consisted of individuals with the clinical diagnosis of OAFNS, without age or sex restriction, who underwent craniofacial computed tomography (CT) scan. Individuals without craniofacial CT scan were excluded. The DICOM files were exported and reconstructed in 3D using RadiAnt DICOM Viewer 2022.1.1., when available. Written informed consent was obtained from the patient or parents.

RESULTS: Twenty individuals were included, 12 males and 8 females. Eight individuals (40%) showed abnormalities of the nasal bone and anterior nasal spine of the maxilla. Sex ratio of individuals presenting ectopic nasal bone was 1M:1F. The abnormalities showed clinical variability, ranging from mildly dysplastic nasal bones and prominent anterior nasal spine to severely dysplastic ectopic bone connecting the nasal bone to the anterior nasal spine of the maxilla.

CONCLUSIONS: The frequency of the ectopic nasal bone in OAFNS is high and clinically variable. The exclusivity of this radiological finding makes the ectopic nasal bone a hallmark of OAFNS that should be used as a tool for clinical diagnosis. Thus, craniofacial CT scan is highly recommended to elucidate the diagnosis of individuals with OAFNS and overlapping phenotypes.

Financial support: CAPES



50

THE EFFECT OF THE TYPE OF ORTHOGNATHIC SURGERY ON THE NASALITY OF INDIVIDUALS WITH CLEFT LIP AND PALATE

MAIA SES¹, Seixas DR², Fukushiro AP^{1,2}, Yamashita RP¹

1. Hospital for Rehabilitation of Craniofacial Anomalies, University of Sao Paulo

2. Bauru School of Dentistry, University of Sao Paulo, Bauru

OBJECTIVE: To investigate the effect of the type of orthognathic surgery with maxillary advancement on nasality of patients over 20 years of experience at HRAC-USP.

METHOD: A retrospective long-term study was carried out based on data collection from medical records of 651 patients with cleft lip and palate who underwent orthognathic surgery between 2000 and 2019. We analyzed the results of nasometry performed to measure nasalance (acoustic correlate of nasality) obtained during reading 5 sentences containing exclusively oral sounds. The evaluation was performed 3 to 5 days before and on average 18 months after orthognathic surgery. Nasalance scores $\leq 27\%$ were indicative of normality, and scores $> 27\%$ were indicative of hypernasality. Patients were distributed according to the type of orthognathic surgery performed: Maxillary Advancement (AVM-n=82), Maxillary Advancement with Nasal Surgery (AVMCN-n=191), Bimaxillary Orthognathic Surgery (COB-n=151) and Bimaxillary Orthognathic Surgery with Nasal Surgery (COBCN-n=227).

RESULTS: Mean preoperative nasalance scores in all groups was indicative of normality ($\leq 27\%$). There was a significant increase in nasalance scores after surgery in all groups, which became indicative of hypernasality in COBCN, COB and AVMCN groups. In the AVM group, nasalance scores remained indicative of normality. Statistical analysis showed that the mean nasalance of patients undergoing AVM was significantly lower than in the other groups, especially in those undergoing COBCN.

CONCLUSION: Orthognathic surgery contributed to the appearance of hypernasality in patients with cleft lip and palate. However, AVM showed less nasality impairment in the patients studied.



51

THE EFFECT OF THE TYPE OF ORTHOGNATHIC SURGERY ON THE VELOPHARYNGEAL FUNCTION OF INDIVIDUALS WITH CLEFT LIP AND PALATE

MAIA SES¹, Seixas DR², Fukushiro AP^{1,2}, Yamashita RP¹

1. Hospital for Rehabilitation of Craniofacial Anomalies, University of Sao Paulo

2. Bauru School of Dentistry, University of Sao Paulo, Bauru

OBJECTIVE: To investigate the effect of the type of orthognathic surgery with maxillary advancement on velopharyngeal function of patients over 20 years of experience at HRAC-USP.

METHOD: A retrospective long-term study was carried out based on data collection from medical records of 651 patients with cleft lip and palate who underwent orthognathic surgery between 2000 and 2019. We analyzed the results of rhinomanometry performed to determine the velopharyngeal area (VA) estimated during the production of the consonant “p” inserted in the word “rampa”. The evaluation was carried out 3 to 5 days before and on average 18 months after orthognathic surgery. Based on the VA values obtained, velopharyngeal closure (VFC) is classified as follows: 0-4.9mm² = adequate; 5.0-9.9mm² = adequate-borderline; 10.0-19.9mm² = borderline-inadequate; and, ≥20.0mm² = inadequate. Patients were distributed according to the type of orthognathic surgery performed: Maxillary Advancement (AVM-n=82), Maxillary Advancement with Nasal Surgery (AVMCN-n=191), Bimaxillary Orthognathic Surgery (COB-n=151), and Bimaxillary Orthognathic Surgery with Nasal Surgery (COBCN-n=227).

RESULTS: Mean preoperative VA showed that all patients presented borderline-inadequate VFC. After surgery, there was an increase in the mean VA values in the 4 groups, but not significant, and VFC was classified as inadequate in the COBCN and AVMCN groups. The VFC classification in the COB and AVM groups remained borderline-inadequate.

CONCLUSION: Orthognathic surgery with maxillary advancement negatively affected velopharyngeal function and contributed to the worsening of velopharyngeal closure in those patients who underwent orthognathic surgery associated with nasal procedures.



52

THE ROLE OF NASOENDOSCOPY IN THE FABRICATION OF PHARYNGEAL BULB PROSTHESIS IN PATIENTS WITH HYPODINAMIC VELOPHARYNX

ANDRADE LKFA¹, Pegoraro-Krook MI^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVE: To develop a manual of guidance for molding of pharyngeal bulb during nasendoscopy for the treatment of velopharyngeal dysfunction.

METHOD: Nasoendoscopy samples were selected from 15 Brazilian Portuguese-speaking patients with cleft palate/lip palate and hypodynamic velopharynx 8 (53%) male and 7 (47%) female, average age 26 years, recorded during molding of the pharyngeal bulb. The samples were analyzed by 2 groups of speech therapists (Brazilian and Chilean) regarding the type and size of the velopharyngeal gap, height of the bulb in the pharynx, touch of the pharyngeal walls and soft palate on the bulb during speech and velopharyngeal closure (VPD) with the bulb during speech. For inter-evaluator agreement between groups, the Kappa agreement test was used.

RESULTS: The agreement between the group of Brazilian and Chilean speech therapists ranged from fair (touch of the left lateral wall in the bulb) to almost perfect (VPD with bulb). Brazilian speech therapists classified the type of velopharyngeal gap of most patients (n=6;40%) as coronal, and the Chileans as circular (n=7;47%). Brazilian speech therapists classified the velopharyngeal gap size of all patients as larger than 50% (n=15; 100%) and Chilean speech therapists classified 14 patients (94%) in this way. After molding, 5 (33%) patients had VPD with the bulb in position and 10 (67%) did not, according Brazilian speech therapists. For the Chilean speech therapists, 4 (27%) presented VPD with the bulb and 11 (73%) did not.

CONCLUSION: The molding of the pharyngeal bulb during nasendoscopy can help the effectiveness of the process.

Financial support: CAPES e CNPq



53

TRANSOPERATIVE PREDICTORS OF HYPERNASALITY AFTER ORTHOGNATHIC SURGERY IN INDIVIDUALS WITH CLEFT LIP AND PALATE: PRELIMINARY RESULTS

DUARTE BG¹, Yaedu RYF^{1,2}, Silveira ITT², Araújo BMAM¹, Silva ASC¹, Yamashita RP¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: To investigate possible transoperative predictors of hypernasality in individuals with cleft lip and palate undergoing orthognathic surgery.

METHODS: Nineteen non-syndromic individuals with cleft lip and palate, of both genders, over 18 years of age, candidates for orthognathic surgery and with normal speech resonance before surgery, were assessed. All patients underwent speech perceptual assessment before (1-2 days-T1) and after (T2) surgery and underwent orthognathic surgery performed in isolation or combined using the Le Fort I osteotomy technique. Hypernasality in T2 was correlated with the following variables: pterygomaxillary suture fracture pattern, classified as correct (A, B, C, D and E) and incorrect (F, G and H), difficulty in transoperative maxillary mobilization (classified as easy, moderate or difficult) and amount (mm) of maxillary advancement in the transoperative and immediate postoperative periods. Data were statistically analyzed by using Sigmaplot 12.0 software. Variables were related to the presence of hypernasality in T2 by the chi-square and "t" tests.

RESULTS: Of the 19 patients, two presented hypernasality in T2. No significant association was identified between the variables and the appearance of hypernasality due to the small number of individuals with the symptom after surgery. However, the results showed the following relationships with hypernasality in T2: F and H fracture; moderate difficulty in transoperative mobilization of the maxilla; mean transoperative movement of 11.5 mm and final of 5.5 mm.

CONCLUSION: Although no statistical significance was found, these preliminary results suggest a trend towards correlation between the appearance of hypernasality and the transoperative aspects studied.



54

UPPER AIRWAYS' DIMENSION INCREASE IN CLEFT LIP AND PALATE CHILDREN SUBMITTED TO THE RAPID MAXILLARY EXPANSION PROTOCOL WITH MAXILLARY PROTRACTION WITH FACEMASK

SANTOS YA¹, Rodrigues LM², Ayrea LCG³, Repeke DB⁴, Repeke CEP^{2,3}

1. Universidade Federal de Sergipe-UFS, Lagarto, Sergipe.

2. Programa de Pós-graduação em Ciências Aplicadas à Saúde (PPGCS), Aracaju, Sergipe.

3. Programa de Pós-graduação em Odontologia (PRODONTO), Aracaju, Sergipe.

4. Centro Integrado de Aperfeiçoamento-CIA, Aracaju, Sergipe.

OBJECTIVE: Unilateral cleft lip and palate (UCLP's) patients after primary surgeries may show deficiency in maxillary growth, presenting skeletal Class III malocclusion causing several respiratory complications resulting from changes in the airway anatomy. Rapid maxillary expansion (RME) and maxillary protraction (MP) is able to correct Class III malocclusion in UCLP patients, but it remains unclear whether it can restore the airway volume. In this context, the aim of this study is to evaluate the upper airways after RME and MP in UCLP children.

METHOD: 3D reconstruction of cone beam computed tomography was used to evaluate the airways of 16 UCLP children in pretreatment (T0), after 1 week of RME (T1) and after 11 months and 3 weeks of MP (T2). A class III group without UCLP (n=6) was included for comparison with the UCLP children.

RESULTS: It was observed that the airway dimensions in UCLP children are similar to class III children without cleft. All measures analyzed showed a significant increase at the end of treatment (ERM + TRM). The measure that obtained the greatest numerical increase was the volume of the airway, followed by the oropharynx and nasal cavity. On the other hand, the oropharynx followed by the nasopharynx and hypopharynx obtained greater results in percentual value.

CONCLUSION: Thus, it is concluded that the orthopedic treatment (RME+MP) in UCLP children was able to increase the airway along its entire length, from the nasopharynx to the hypopharynx and enlarging the nasal cavity.



PROJETO DE PESQUISA APROVADO PELO CEP



55

ANALYSIS OF MASTICATORY FUNCTION AND ITS RELATIONSHIP WITH THE NUTRITIONAL STATUS OF INDIVIDUALS WITH TREACHER COLLINS SYNDROME

MEDEIROS LH¹, Silva LVF¹, Bueno PM¹, Barros SP¹, Fukushiro AP^{1,2}, Trindade-Suedam IK^{1,2}

1 - Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo - HRAC/USP, Bauru;

2 - Bauru School of Dentistry, University of São Paulo - FOB/USP, Bauru.

OBJECTIVE: To characterize the masticatory function of children, adolescents and adults with Treacher Collins Syndrome (TCS), through the analysis of bite force (BF), granulometry, color mixing test and masticatory pattern, and to verify the relationship of these parameters with the nutritional status (NS) of this population.

MATERIAL AND METHODS: This cross-sectional study was approved by the institutional review board of HRAC (5.622.977). Based on the formal calculation of the sample, a minimum of 10 individuals per group and per age range will be selected, divided into the following groups: 1) TCS: children, adolescents and adults, 2) Control class I: children, adolescents and adults with normal occlusion and facial profile, 3) Control class II: children, adolescents and adults with class II malocclusion, which represents 90 individuals in the total sample. The following tests will be performed: 1) BF: using a gnathodynamometer (IDDK, Kratos), 2) Granulometry, by the masticatory cycle tests (Image J®), 3) Color Mixing Ability Test, through masticatory cycles, using the ViewGum© software (Dhal Software, Greece), 4) Chewing Pattern (MBGR Protocol), including number of cycles, speed, time and chewing pattern, 5) NS: composed by Body Mass Index (BMI) assessment, 6) Body Composition: folds and body circumferences, and, 7) Food Consumption: 24-hour recall to assess food intake of macronutrients (Nutralife®).

EXPECTED RESULTS: Based on previous studies from our group (Medeiros et al., 2022) that indicate impairment in the masticatory function of this population, it is expected to definitively characterize the masticatory function of this population and its relationship with the NS.

Financial Support: CAPES and Nutralife®



56

CLASSIFICATION OF PTERYGOMAXILLARY SUTURE SEPARATION AFTER LE FORT I OSTEOTOMY IN CLEFT PATIENTS USING CONE BEAM COMPUTED TOMOGRAPHY

SILVEIRA ITT², Reis LAC¹, Barcellos BM¹, Yaedú RYF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

AIM: The aim of this study is to classify the fractures that occur in the pterygomaxillary suture region during Le Fort I osteotomy in patients with cleft lip and palate.

MATERIAL AND METHOD: A total of 200 Cone Beam Computed Tomography scans of patients were evaluated. In the preoperative tomography, morphometric measurements of the pterygomaxillary suture region were made in the axial direction and in the sagittal direction. The insertion of the pterygomaxillary suture with the posterior wall of the maxilla and the sagittal direction were also measured. As well, the distance from this insertion to the cervical of the maxillary second molar. In the postoperative tomography, the fracture pattern of the pterygomaxillary suture was evaluated in the axial direction, classified as correct and incorrect, in the sagittal direction, the osteotomy relationship with the type of fracture was evaluated, whether it was at level or above.

RESULTS: The type of fracture was also correlated with the level of osteotomy by the Chi-square test ($p < 0.001$) and it possible to predict that when the osteotomy was performed above the suture level, there was a 3161 times greater chance of having a incorrect fracture.

CONCLUSIONS: The size of the pterygomaxillary suture insertion does not influence the occurrence of incorrect fractures, because they are related to the type of osteotomy. Thus, when the separation occurs above the osteotomy line, there is a incorrect fracture.

Financial support: CAPES



57

CLINICAL FINDINGS RELATED TO ALTERED SPEECH INTELLIGIBILITY AFTER ORTHOGNATHIC SURGERY IN PATIENTS WITH CLEFT LIP AND PALATE

SILVA MLC^{1,2}, Silva ASC², Araújo BMAM², Fukushima AP^{1,2}

1. Faculdade de Odontologia de Bauru-FOB/USP, Bauru;

2. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

PURPOSE: To identify the alterations in speech production related to reduced intelligibility after orthognathic surgery (Le Fort I) in individuals with cleft lip and palate.

METHODS: The study was approved by the Institutional Ethics Committee (n. 4,739,761). Spontaneous speech samples of 50 adult patients with repaired cleft lip and palate were analyzed by six different evaluators before and after surgery, using the intelligibility classification scale proposed by Souza et.al, Pró-Fono R. Atual. Cient.,2010. Once patients with reduced intelligibility after surgery were identified, a descriptive analysis of altered speech aspects was performed, according to the evaluation protocol used in routine care.

RESULTS: From the 100 speech samples analyzed (50 pre and 50 post), eight (16%) participants had reduced intelligibility in up to two levels of the scale. Of this group with reduced intelligibility, all had phonetic disorder, seven (87.5%) had hypernasality to some degree, two (25%) patients had nasal air emission, two (25%) had compensatory articulation, one (12.5%) had weak intraoral air pressure, and two (25%) had restricted mouth opening during speech.

CONCLUSIONS: The impairment of the anatomical and functional balance of the orofacial structures affects speech production in a variable manner, so that, even after rehabilitation of the dentofacial deformity, there is a need to adjust the aspects that involve speech, in part of these patients, reinforcing the importance of speech therapy.

Financial support: PIBIC-CNPq



58

EVALUATION OF THE IMPACT OF ALVEOLAR BONE GRAFT SURGERY ON THE NASAL INTERNAL DIMENSIONS OF INDIVIDUALS WITH CLEFT LIP AND PALATE USING COMPUTED TOMOGRAPHY

NASCIMENTO MLB¹, Loureiro NB¹, Rodrigues MNM³, Trindade-Suedam IK^{1,2}, Trindade SHK^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

3. Pontifícia Universidade Católica - PUC/RS, Rio Grande do Sul.

OBJECTIVE: Cleft lip and palate are the most common congenital malformations in the craniofacial region (Amaral et al, Revinter, 1996). Treatment begins with the primary surgeries, cheiloplasty and palatoplasty. Alveolar bone grafting (EOA) is a procedure that reconstructs the existing bone defect in the clefts (Trindade et al, Clef Palate Craniofacial J, 2016). The evaluation of the nasal morphology and internal dimensions of the upper nasal airways requires the use of exams that allow the objective measurement of areas and volumes. Cone beam computed tomography (CBCT) stands out (Schwab et al, Otolaryngol Clin North Am, 1998). OAE surgery has as an additional objective the reconstruction of the nasal fossa anatomy, therefore it becomes important to evaluate the impact of this procedure on the nasal internal dimensions of individuals with cleft lip and palate. This study aims to evaluate the internal nasal dimensions of adults with cleft lip and palate after OAE surgery, through the analysis of images obtained by CBCT.

METHODS: We will include 50 patients who were in attendance at HRAC-USP, criteria: bilateral and unilateral incisive transforamen fissure, age between 8 and 18 years, with indication for OAE, already submitted to primary plastic surgeries. Nasal volumes will be obtained from marking by Mimics® software.

RESULTS: It is expected that in the immediate postoperative period, there will be a reduction of the anterior segment of the nasal fossae (AST1). In the late postoperative period, due to bone remodeling mechanisms, the differences found are no longer significant. It is speculated that EOA should not interfere with the internal nasal anatomy.



59

IDENTIFICATION OF THE HYPODYNE VELOPHARYNX IN CLEFT PALATE

MELO DA SILVA C¹, Pegoraro-Krook MI^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: To identify the hypodynamic velopharynx in individuals with cleft palate.

METHODS: A minimum of 35 nasoendoscopy recordings will be obtained from a convenience sample, consisting of video recordings of nasoendoscopy, of patients with VFD, of both sexes, who underwent pharyngeal bulb shaping during this examination. The selected video recordings will be evaluated by the researcher (who has experience in the diagnosis of VPS by means of nasoendoscopy), with regard to the occurrence of movement of the velopharyngeal structures, using an adaptation of the protocol proposed by Golding-Kushner et al. (1990). This protocol is a semi-quantitative measurement model that was developed in order to standardize the obtaining of information about the functioning of the VFM by means of nasoendoscopy. It is based on relative measurements, with the classification of the contrast between the resting position and the amount of displacement of pharyngeal structures.

EXPECTED RESULTS: The identification of hypodynamic velopharynx in patients with pharyngeal bulb indication provides greater efficacy in the rehabilitation process as it assists in the differential diagnosis of VFD.



60

PHARYNGEAL OBTURATOR PROSTHESIS IN CHILDREN WITH CLEFT LIP AND PALATE IN THE PRIMARY DENTITION

PETRONI VBP¹, Aferri HC¹, Lopes MMW^{1,2}, Dutka JCR^{1,2}, Pegoraro-Krook MI^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

OBJECTIVES: Verify the effectiveness of the retention system obtained by resin stops on the buccal surface of deciduous teeth; compare the best stop conformation in tensile and compression forces; evaluate the relationship between length of the intermediate and force required to displace the prosthesis.

METHODS: 35 scanned plaster models obtained from the digitized collection of the Florida Project (convenience sample), of patients who underwent lip and palate surgery, with models achieved between 6 and 7 years of age. Each model was replicated four times: R1) model identical to the original R2) with canine retentions; R3) with molar retentions; R4) with molars and canine retentions. These replicas will be divided into 03 groups: T – tensile forces; C1 - compressive forces to the midpoint of the intermediate, and; C2- compressive forces at the end of the intermediate. A pharyngeal obturator prosthesis will be fabricated on each R1 replicate, being used in the four replicates for the tests. Each group of tests will have 20% of their models submitted to three measurements of T, of C1 and C2, in order to demonstrate the effectiveness of obtaining valid results of the clinical trial machine. For comparison of the intra-group mean values ANOVA test will be applied. For comparison of the pairwise mean values of groups C1 and groups C1 and C2, the t-test will be applied.

EXPECTED RESULTS: the addition of resin stops will provide greater retention and stability of the pharyngeal obturator when compared to the model without addition of stops.



61

PHOTOBIMODULATION IN PATIENTS WITH CLEFT LIP AND PALATE UNDERGOING ORTHOGNATHIC SURGERY – ANALYSIS WITH INFRARED THERMOGRAPHY

SANTOS CCV¹, Almeida ALPF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: The aim of this study is to evaluate the effects of photobiomodulation after orthognathic surgery in patients with cleft lip and palate, using infrared thermography.

METHODOLOGY: The sample of this study will be composed of 75 patients with cleft lip and palate. Through randomization, individuals will be divided into five groups: Group 1 (control) – without laser application; Group 2 (LBI) – application of point laser in the postoperative period; Group 3 (LBI placebo) – the application of point laser in the postoperative period will be simulated; Group 4 (ILIB) – systemic laser application; Group 5 (ILIB placebo) – the application of systemic laser will be simulated. The times will be divided into: T0 immediate postoperative, T1 – 24 hours postoperative and T2 - 48 hours postoperative. The laser used in Groups 2 and 4 in the punctual form will be applied 4J per point in 14 points on the patient's face. The ILIB will be applied through a specific bracelet, on the patient's wrist, for 5 to 15 minutes. For postoperative analysis, pain, swelling will be measured and the distribution of temperature emitted by the body surface will be mapped through infrared thermography.

EXPECTED RESULTS: Photobiomodulation is able to increase cell metabolism and produce effects such as analgesia, tissue regeneration and modulation of the inflammatory process. Therefore, it is a therapeutic method that has been shown to be viable to reduce complications after orthognathic surgery.

Financial support: Capes



62

POTENTIAL IMPACTS OF THE COVID-19 PANDEMIC ON THE SOCIAL COMMUNICATION AND PRAGMATIC SKILLS OF CHILDREN WITH CLEFT LIP AND PALATE

RONDINA IS¹, Dutka JCR^{1,2}, de Souza OMV¹, Pegoraro-Krook MI^{1,2}

1. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

2. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

OBJECTIVES: 1) To investigate the influence of social isolation resulting from the COVID-19 pandemic on the pragmatic skills and social communication of children with cleft lip and palate, from the perspective of parents; 2) To investigate possible risk factors for language development resulting from the social isolation imposed by the pandemic on these same children.

METHODS: A survey will be carried out on the number of children undergoing treatment at HRAC/USP, with cleft lip and palate, who, from March 2020 (beginning of the COVID-19 pandemic) to March 2022 were aged between 3 and 5 years. After this survey, a questionnaire (Google Forms) will be sent to the parents who agree to participate in this study. The questionnaire contains questions about the development of language and social communication, as well as the restrictions imposed by the COVID-19 pandemic, about changes in routine and environment, and the possible limitations of the speech rehabilitation services.

EXPECTED RESULTS: We expect that our results confirm the hypothesis that the COVID-19 pandemic context and its new demands had an effect on the functional, conversational and social communication skills of children with cleft lip and palate, or even on the development of children who were undergoing speech therapy.

Financial support: CNPq



63

PREVALENCE OF SLEEP BREATHING DISORDERS IN INDIVIDUALS WITH CHROMOSOME 22Q11.2 DELETION SYNDROME AND ITS RELATIONSHIP WITH CARDIORESPIRATORY CAPACITY

SPILARI S¹, Zechi-Ceide RM¹, Kokitsu-Nakata NM¹, Trindade-Suedam IK^{1,2}, Trindade SHK^{1,2}

1. Hospital for Rehabilitation of Craniofacial Anomalies, University of Sao Paulo

2. Bauru School of Dentistry, University of Sao Paulo, Bauru

OBJECTIVES: The 22q11.2 deletion syndrome (del22q11.2) is common in humans, with several clinical findings, such as craniofacial anomalies, congenital heart diseases and obstructive sleep apnea (OSA), which may predispose or worsen the cardiorespiratory capacity of these individuals. The study aims to analyze the prevalence of OSA and a possible correlation with nasal congestion and cardiorespiratory deficiency in patients with the spectrum of del22q11.2.

METHODS: Project approved by the Human Research Ethics Committee CAAE 64033522.8.0000.5441. Prospective cross-sectional study that will analyze the prevalence of OSA in individuals with del22q11.2 and its correlation with nasal congestion and cardiorespiratory function. A total of 130 children and adolescents from 6 to 14 years old with clinical or molecular diagnosis of del22q11.2 will be included. Anthropometric measurements and a structured clinical interview will be performed. Additionally, nasal obstruction and OSA symptoms will be evaluated by the "visual analog scale", "nasal congestion index questionnaire" (CQ-5), "children's sleep disorders scale" (EDSC) and "pediatric sleep questionnaire" (PSQ) respectively. The "6-minute walk test" will measure cardiorespiratory function.

EXPECTED RESULTS: A high prevalence of OSA in this special group of patients is expected, correlated with nasal congestion e low cardiorespiratory performance.



64

RHYTHMIC FEATURES OF SPEECH OF CLEFT PALATE SUBJECTS: ACOUSTIC ANALYSIS AS TOOL FOR SPEECH THERAPY PRACTICE

TONOCCHI R¹, Oliveira GM¹, Nishida G², Dutka JCR³, Pegoraro-Krook MI³, Tonocchi R¹

1. Universidade Tuiuti do Paraná - UTP, Curitiba

2. Departamento Acadêmico de Linguagem e Comunicação - Universidade Tecnológica Federal do Paraná - UTFPR, Curitiba

3. Departamento de Fonoaudiologia da Faculdade de Odontologia de Bauru - FOB/USP, Bauru / Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

OBJECTIVES: To verify the contribution of acoustic analysis to the speech therapy clinic regarding characteristics of the speech rhythm of subjects with cleft palate (CP).

METHOD: It is a transversal study, concerned with description and quantification of rhythm features of cleft palate subjects. To understand CP speech, the research takes in consideration two groups: two operated cleft palate subjects (Experimental group - EG); two subjects with any speech disorder (Control Group - CG). 12 sentences were recorded, six of them were the target sentences, and the other six were random read for distraction purposes. The sentences were recorded at Audacity, using a M-audio interface and a Shure SM-58 microphone. Each sentence was segmented in a Vowel to Vowel way and the duration of segmented speech was extracted. The analysis was made in Praat®. All measures were normalized and plotted in Z-scores curves.

RESULTS: Cleft palate subjects presented two different patterns. The EG subjects can follow the CG characteristics. The only difference is related with elevated values of duration in some moments of the sentences. It could be related with an improvement of energy use and a slower rhythm. In some productions, EG subjects reverse the rhythmic pattern of CG speech productions.

CONCLUSION: There is a difference between cleft palate speech and no speech disorder subjects. Such data draw attention to the relevance of taking temporal aspects of utterances for the speech therapy clinic to describe, understand and direct the therapeutic approach around speech disorders, as in cases of cleft palate subjects.

Financial support: CNPq



65

SLEEP AND BREATHING IN INDIVIDUALS WITH TREACHER COLLINS SYNDROME: COMPARISON OF TWO POLYSOMNOGRAPHIC METHODS FOR THE DIAGNOSIS OF OBSTRUCTIVE SLEEP APNEA

FIDÉLIS DA SILVA LV¹, Medeiros LH¹, Bueno PM¹, Trindade SHK², Trindade-Suedam IK³

1. PhD student, Postgraduate Program in Rehabilitation Sciences, Laboratory of Physiology, Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo, HRAC-USP
2. Professor, Medical Course, FOB-USP and Laboratory of Physiology, HRAC-USP
3. Associate Professor, Department of Biological Sciences, FOB-USP and Laboratory of Physiology, HRAC-USP

OBJECTIVE: To evaluate the occurrence of obstructive sleep apnea (OSA) in individuals with Treacher Collins Syndrome (TCS), through: 1) type I polysomnography (PSG) exam, 2) type IV PSG exam, 3) assessment of anthropometric parameters, 4) assessment of the quality of sleep, and, 5) assessment of quality of life, using validated questionnaires.

METHOD: IRB approval 5.880.145. All patients (6-39y), diagnosed with TCS, regularly enrolled at HRAC-USP will be invited to participate. Participants will be submitted to type I PSG (EMBLA N7000 or FINDER 900) and type IV (OXISTAR-BIOLOGIX) and the Apnea and Hyponea Index (AHI) and Desaturation Index (IDO) will be assessed, respectively. Additionally, weight, height, BMI, blood pressure, cervical circumference and abdominal circumference will be clinically measured. The risk of OSA and the degree of daytime sleepiness will be evaluated by means of the Berlin Questionnaire, the STOP BANG Questionnaire and the Epworth Sleepiness Scale, in participants aged 15y-39y) while the CQ5 questionnaire - Nasal Congestion Index and Sleep Disorders Scale for Children - EDSC will be used in individuals aged 6y-14y. The SF-36 Questionnaire (Short Form Health Survey) will be used for quality of life assessment.

RESULTS: The hypothesis of the present study is that individuals with TCS have a high risk for OSA, associated with daytime symptoms such as excessive sleepiness and poor quality of life, even at an early age. It is also expected to demonstrate that type IV PSG can be a low-cost alternative with low operational difficulty for screening and diagnosing OSA in this population

Financial support: CAPES



66

STEREOPHOTOGRAMMETRY FACIAL ANALYSIS OF PATIENTS WITH CLEFT LIP OR/AND PALATE

NOGUEIRA VO¹, Neves MC¹, Soares S^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: To measure facial proportions such as: nasolabial angle, vermilion of the lip, lip scar from primary surgeries, dental exposure with lip at rest, facial symmetry and facial profile in patients with cleft lip and/or palate and prosthetically rehabilitated, of the same age group as according to gender, in order to observe the facial features in these patients.

METHODS: Sixty patients will be selected, assisted at the Hospital de Reabilitação de Anomalias Craniofacial (HRAC-USP), in routine care or control, at the proposed ages, of both genders. The sample will consist of three-dimensional digital images collected with the VECTRA H2 stereophotogrammetry device of patients with complete cleft lip and/or palate, uni and/or bilateral, aged 21 to 40 years, of both genders, regularly register in HRAC /USP. The sample inclusion criteria will be: age, patients with unilateral or bilateral cleft lip and/or palate, prosthetically rehabilitated. The selected patients will be divided into 2 groups according to age group containing 30 patients in each group, the first being 21 -30 and the second 31-40 years of both genders.

EXPECTED RESULTS: This research intends to statistically determine the expected measurements of the facial proportions of patients with unilateral or bilateral complete cleft lip and/or palate and statistically evaluate the differences between age groups.



67

STUDY OF SEPTAL DEVIATION PATTERNS, NASAL LATERAL WALL MALFORMATIONS AND INFERIOR NASAL TURBINATES DIMENSIONS IN PATIENTS WITH COMPLETE UNILATERAL CLEFT LIP AND PALATE

KAYO GM¹, Benatti CZ¹, Nascimento ML¹, Loureiro NB¹, Trindade-Suedam IK^{1,2}, Trindade SHK^{1,2}

1. Hospital for Rehabilitation of Craniofacial Anomalies, University of Sao Paulo

2. Bauru School of Dentistry, University of Sao Paulo, Bauru

INTRODUCTION: Cleft lip and palate (CLPs) can change the morphology of the inner and outer nose. Nasal septum deviation (NSD) is a common feature in patients with complete unilateral cleft lip and palate (C-UCLP), which may be associated with hyperplasia of the inferior nasal turbinate (INT). Lateral nasal wall (LNW) malformations and high rate of chronic rhinosinusitis (CRS) can be also present.

OBJECTIVES: To characterize the pattern of NSD in C-UCLP. Additionally, evaluation of the INT, LNW malformations and presence of CRS will be performed.

METHODS: Paranasal Sinus Cone Beam Computed Tomography (CBCT) exams of patients with C-UCLP, will be enrolled in the study. Inclusion criteria: patients between 18 and 59 years of age; both sexes. Patients previously submitted to nasal and orthognathic surgery will be excluded.

EXPECTED RESULTS: It is expected to find a high occurrence of severe septal deviation on the side of the cleft. Additionally, on the side without the cleft, the inferior nasal turbinates should be larger. Frequent chronic rhinosinusitis and lateral nasal wall malformations are also supposed to be found. Studies that objectively evaluated the volume of the inferior nasal turbinates, pattern of septal deviation and nasal lateral wall anatomy in patients with cleft lip and palate are scarce. In this way, the present study can collaborate with the complex process of rehabilitation of patients with CLPs.

Financial support: CNPq, USP



68

SURGICAL CORRECTION OF LOWER LIP EVERSION IN PATIENTS WITH CLEFT LIP: RESEARCH PROJECT

MARIOTTO LGS¹, Carvalho LRA¹, Gringo CPO¹, Gomes JPF¹, Yaedú RYF^{1,2}

1- Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru;

2- Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: Although it occurs in the upper lip, cleft lip and palate (CLP) and its rehabilitation process causes anatomical changes and functional compensations that will reflect on the morphology of the lower lip, making it hypertrophic and everted. Thus, the main objective of this study is to evaluate the results of surgical inversion of the lower lip associated with orthognathic surgery in the morphology and aesthetics of the lower lip in patients with CLP.

METHODS: The sample will consist of 70 patients with unilateral cleft lip and palate who will undergo orthognathic surgery at the Hospital for Rehabilitation of Craniofacial Anomalies of the University of São Paulo. In the patients of the experimental group (n=35), the inversion of the lower lip will also be performed. Cone beam computed tomography scans will be performed preoperatively and 1 year postoperatively, which will be used for three-dimensional evaluation of changes in position, eversion and protrusion of the lower lip. For the subjective evaluation of the aesthetic result, photographs will be taken and will be evaluated for the attractiveness of the lower lip by two groups of examiners: 3 oral and maxillofacial surgeons or orthodontists and 3 laypersons. Each examiner will record its perception on a Likert Scale. The results will be evaluated with a significance level of 5%.

EXPECTED RESULTS: The surgery is expected to significantly improve the projection and eversion of the lower lip of patients in the experimental group, both in objective and subjective evaluation.

Financial support: CAPES



69

TOMOGRAPHIC STUDY OF DENTAL ANOMALIES OF ENDODONTIC INTEREST IN AN INDIVIDUAL WITH CLEFT LIP AND PALATE

NOGUEIRA ACPA¹, Pinto LC¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

OBJECTIVE: identify and quantify hyperplastic, hypoplastic and heterotopic dental anomalies adjacent to the cleft lip and palate. As well as detecting the anomalies found of interest to endodontics, in order to elaborate specific care when endodontic treatment is needed.

METHODS: A retrospective study will be carried out using Cone Beam Computed Tomography (CBCT), already existing in the archive of the Radiology sector of HRAC, obtained with the tomograph I-Cat (Imaging Sciences - Kavo) of individuals over 13 years old, with complete unilateral cleft lip and palate, non-syndromic, who agreed to participate in the study. Images will be sequentially verified by a single trained observer using the I-Cat Vision software.

RESULTS: The data will be organized in tables according to the types of dental anomalies found, recorded in a specific form duly identified and later transcribed into spreadsheets in the Excel program for statistical analysis.

CONCLUSION: The results will contribute to the elaboration of a treatment plan with specific care when endodontic treatment is needed.



70

TRANSLATION CROSS CULTURAL ADAPTATION AND VALIDATION OF THE BONE ANCHORED QUESTIONNAIRE INTO BRAZILIAN PORTUGUESE

PELANDA-ZAMPRONIO CD¹, Oliveira JRM¹, Maximino LP^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: To translate, cross-culturally adapt and content validate of the Bone-Anchored Hearing Aid Questionnaire.

METHODS: Study was approved (5.682.689) for translation, cross-cultural adaptation and validation of the Bone-Anchored Hearing Aid Questionnaire. This questionnaire assesses the satisfaction of individuals with hearing loss due to ear malformation who use a Bone-Anchored Hearing Aid. In the translation and cross-cultural adaptation process, the protocol Beaton et al 2000 will be followed, with steps: translation, synthesis of the translation, back translation, expert committee review, pre-test in the target population, sending reports and forms to the developer. The collaborators will be two translators fluent in Portuguese and two back-translators english. After the synthesis of the translation-retranslation, the committee made up by the translators, back-translators, one methodologist and one Audiologist will evaluate: semantic, idiomatic, cultural and conceptual equivalence. The questionnaire will be applied to thirty individuals from the target population. All reports and forms will be presented to the developer. In the validation the psychometric properties will be verified, that is, the content analysis will be done by three speech therapists who will assess: clarity of language, practical relevance and theoretical relevance using the content validation coefficient as a measure, and by thirty individuals of the population, who will assess the adequacy of language and understanding of the content.

EXPECTED RESULTS: Expected to obtain the translation, cross-cultural adaptation and reliable validation of the Bone-Anchored Hearing Aid Questionnaire into Portuguese being adequate in clinical applicability to evaluate the satisfaction of individuals users of Bone-Anchored Hearing Aid.



RELATO DE CASO CLÍNICO



71

A NOVEL MISSENSE VARIANT P.SER118ARG IN EFNB1 CAUSING OCULAR HYPERTELORISM AND CLEFT LIP AND PALATE IN A BOY AND CRANIOFRONTONASAL SYNDROME PHENOTYPE IN HIS MOTHER

GALVANIN AL¹, Kokitsu-Nakata NM¹, Vendramini-Pittoli S¹, Zechi-Ceide RM¹

1- Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

OBJECTIVE: describe a boy presenting orofacial cleft associated with ocular hypertelorism and variant in EFNB1 gene.

CLINICAL REPORT: A boy born in 2016, by cesarean, at term, after an uneventful pregnancy. Clinical evaluation at ages of 7 month and 2 years showed brachycephaly, prominent forehead, ocular hypertelorism, upslanting palpebral fissures, epicanthal folds and cleft lip and palate. Neuropsychomotor development was normal. Familial history showed an atypical phenotype in mother, including abnormal cranial conformation with low frontal hairline, severe ocular hypertelorism, broad nose with median nasal groove, cleft lip and palate, short neck, narrow sloping shoulder, grooved nails, and right hallux duplication. Karyotype was normal in the boy (46, XY) and in his mother (46, XX). Sanger sequencing of the EFNB1 gene showed the variant NM_004429.5:c.354C>A (p.Ser118Arg), in both cases.

CONCLUSION: The change p.Ser118Arg in EFNB1, present in the boy and his mother, has not previously described and it has classified as pathogenic or likely-pathogenic in-silico predictions programs. The segregation of the variant with the craniofrontonasal syndrome full phenotype in the mother and less severe phenotype in her son reinforces the pathogenic status of this variant. Interestingly, the boy here reported has orofacial cleft in association with ocular hypertelorism. Usually, males carrier of the pathogenic variant in EFNB1 gene display a mild phenotype characterized by ocular hypertelorism. Thus, variant screening in EFNB1 should be considered in male with orofacial cleft associated with ocular hypertelorism, since pathogenic variants in this gene can also cause a more moderate phenotype.

Financial support: Smile Train



72

AESTHETIC-FUNCTIONAL REHABILITATION WITH ORTHOGNATHIC SURGERY IN A PATIENT WITH CLEFT LIP AND PALATE

GRINGO CPO¹, Barcellos BM¹, Mello MAB¹, Yaedú RYF^{1,2}

1. Hospital for Rehabilitation of Craniofacial Anomalies, University of Sao Paulo

2. Bauru School of Dentistry, University of Sao Paulo, Bauru

OBJECTIVE: the objective of this case is to report the surgical treatment of a patient with Class III malocclusion, with cleft lip and palate transforamen unilateral on the left side performed at HRAC.

CASE REPORT: male patient, 24 years old, with mandibular prognathism. Her main complaints were mastication and aesthetics. Previously, orthodontic preparation was performed. Orthognathic surgery was performed with Le fort I osteotomy with plates and screws to correct the skeletal discrepancy. The patient is in postoperative control for 2 years with stable occlusion and in orthodontic completion.

CONCLUSION: orthognathic surgery is a form of surgical treatment that allows the correction of malocclusions and discrepancies between the jaws, establishing optimal functional results, promoting good aesthetic results and satisfying the patient's complaints.

Financial support: Capes.



73

BARAITSER-WINTER CEREBROFRONTOFACIAL SYNDROME: AN ADDITIONAL BRAZILIAN CASE REPORT

SERIGATTO HR¹, Kokitsu-Nakata NM¹, Di Donato N², Guion-Almeida ML¹, Zechi-Ceide RM¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru;

2. Institute for Clinical Genetics, Faculty of Medicine Carl Gustav Carus, TU Dresden, Dresden, Germany

OBJECTIVE: to describe a Brazilian female with the Baraitser-Winter cerebrofrontofacial syndrome (BWCFFS) phenotype and novel variant in the ACTB gene.

CASE REPORT: A girl, born in 2002, was evaluated at age 3 months at the Hospital of Rehabilitation of Craniofacial Anomalies (HRAC/USP). She had borderline macrocephaly, prominent metopic ridge, broad face, ocular hypertelorism, arched eyebrows, bilateral ptosis, epicanthus, long palpebral fissures, broad nasal bridge and tip, short nose, long philtrum, full cheeks, cleft lip and palate, low-set ears, short neck, pterygium colli, cervical cystic hygroma, axillary pterygium, dimple in the elbows, knees and sacral region, and left hallux duplication. Neuromotor development was normal. MRI showed partial corpus callosum agenesis, third ventricle dilatation, parallelism of the lateral ventricles, and cystic lesion in the pineal gland. Clinical follow-up at ages 5, 10, 15, and 19 years old showed short stature, facial phenotype worsening, single maxillary central incisor, agenesis of teeth 11, 12, 15, 25, 35, and 45, bilateral mild conductive hearing loss, tonic-clonic seizures, and mild global developmental delay. Sanger sequencing of the ACTB gene showed a heterozygous missense variant NM_001101.3:c.355A>G (p.Met119Val).

CONCLUSION: the clinical findings presented are compatible with the clinical diagnosis of BWCFFS (OMIM 243310; 614583). The missense variant in the ACTB gene was not previously reported and is classified as likely pathogenic by in-silico prediction programs, indicating it as causative. In addition, the change of Met119 in ACTB was previously described in a patient with severe BWCFFS phenotype, reinforcing its pathogenicity and elucidating the diagnosis.



74

BIMAXILLARY ORTHOGNATHIC SURGERY IN A PATIENT WITH UNILATERAL CLEFT LIP AND PALATE - CASE REPORT

CASTRO-MERAN AP², Carvalho LRA¹, Mariotto LGS¹, Mello MAB¹, Ferreira Jr O², Yaedú RYF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

PURPOSE: to report a clinical case of a male patient, with Class III malocclusion and unilateral cleft palate, submitted to bimaxillary orthognathic surgery after virtual surgical planning.

CASE REPORT: Patient with complete transforamen cleft on the right side, with lip and palate repaired, presented maxillary deficiency with mandibular protrusion, being diagnosed with Class III malocclusion. After carrying out orthodontic preparation for dental decompensation and alignment and leveling of the arches, the case was planned virtually using Nemoceph Software to simulate three-dimensionally the maxillary advancement and mandibular setback. The facial analysis shows an overjet of -7mm and an overbite of 2mm, absence of can't, no exposure of the upper incisor, deviation of the midline of the maxilla by 2mm to the right and of the chin by 6mm to the right. Surgical planning was advance of 11mm, clockwise rotation of 8.5 degrees; in the mandible, only clockwise rotation of the occlusal plane and correction of overbite and overjet were performed. The patient has been in the postoperative period for more than a year with stable occlusion, no mobility of the segments and reestablished function.

CONCLUSION: orthognathic surgery can be considered as a final phase of the treatment of patients with clefts, thus restoring the function and aesthetics of these individuals when planned and performed correctly.



75

CHALLENGES OF SEVERE DISCREPANCIES IN ORTHOGNATHIC SURGERY: CASE REPORT

DIAS RS¹, Silveira ITT², Mello MAB¹, Mariotto LGS¹, Yaedú RYF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

AIM: Report the case of a patient with left unilateral cleft lip and palate and severe maxillomandibular discrepancy treated with orthognathic surgery.

CASE REPORT: Male patient, non-syndromic, presented severe class III malocclusion. In the facial analysis, it was observed -17 mm of overjet, 0 mm overbite, deficiency of the middle third of the face, absence of columella support and bilaterally widened nose wing. Surgical planning was performed using the Dolphin Imaging 11.8 program and through cephalometric analysis, maxillary retrognathism and mandibular prognathism with flattening of the maxillary occlusal plane were identified. The proposed and executed plan was Le Fort I osteotomy for anteroposterior advancement 10 mm and bilateral sagittal osteotomy for a setback of 10 mm. Osteosynthesis was performed with 2.0 system plates and screws, using the hybrid technique of mandibular fixation, with 2.0 system plates and bicortical screws. In the 8-year postoperative period the patient completed orthodontic treatment, class I occlusion and satisfactory facial esthetics.

CONCLUSION: The major challenges of major discrepancies are vascular support, limitation of transoperative mobilization, stability of surgery and soft tissue response to surgical movement. One of the biggest challenges in the rehabilitation of cleft lip and palate is the treatment of large skeletal discrepancies due to the high rates of recurrence. Severe discrepancies present difficulties in planning and predictability of results, although can be treated definitively with orthognathic surgery with adequate planning and surgical technique.



76

CLP AND CRANIOFACIAL ANOMALIES IN SANTA CRUZ DE LA SIERRA, BOLIVIA. CHALLENGES FOR A REHABILITATION TEAM

MEDRANO-GUTIERREZ A¹, Yaedu R^{1,2}, Miranda S³, Mendes P⁴, Ferreira O¹, Dalben G²

1. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

2. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

3. Caja Petrolera de Salud, Santa Cruz de la Sierra; 3- Faculdade de Odontologia de Araçatuba/UNESP

4. Faculdade de Odontologia de Araçatuba/UNESP

CLP and craniofacial anomalies are a complex congenital anomalies, they are not the focus of attention for the health professional authorities in Bolivia. Those individuals require a long, costly and interdisciplinary treatment. In this particular case some NGOs provide care by forming surgical missions where teams of surgeons and ancillary staff make visits with focus specifically for surgical procedures. This paper describes the main challenges encountered by an interdisciplinary team of professionals while building a framework to provide free care for patients affected by oral clefts and/or craniofacial anomalies.



77

COMPLEX TREATMENT OF SIBLINGS WITH VAN DER WOUDE SYNDROME

BERNARDES DG¹, Braga BMR¹, Peixoto AP¹, Nakata NMK¹, Ozawa TO¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

OBJECTIVE: This case report describes a treatment of two twin siblings with complete unilateral cleft lip and palate (CUCLP) associated with Van der Woude syndrome (VWS), treated by the orthodontic department of the Hospital for Rehabilitation of Craniofacial Anomalies (HRAC/USP), which presented a high level of complexity and is a great example of the available resources that can be used in these cases.

CASE REPORT: Both patients initiated the treatment at 4 months old presenting CUCLP and lip pits, the most common aspect of VWS. They had undergone the primary surgeries including the removal of the lip pits. The beginning of the orthodontic treatment occurred when they were 8 years old, and they were diagnosed with skeletal class III due severe maxillary deficiency, although one of them showed a major complexity (Goslon Yardstick 4 and 5). Furthermore, they had tooth agenesis in the maxillary arch increasing the severity of the cases and their bad prognosis. Hence, the choice of treatment was orthognathic surgery in both cases, and they were prepared with conventional fixed appliances until the appropriate age.

CONCLUSION: As both brothers had the absence of at least two anterior teeth, there was a high concern about the final esthetic obtained. However, they were successfully rehabilitated after the orthognathic surgery with the assistance of the periodontics and restorative dentistry department, testifying the importance of the interdisciplinary conduct to achieve excellence in the rehabilitation of these cases.



78

CONSERVATIVE ORTHODONTIC TREATMENT OF SEVERE SKELETAL CLASS III MALOCCLUSION IN A PATIENT WITH LIP AND PALATE CLEFT: A CASE REPORT

RUFINO SS¹, Penhavel RA¹

1- Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

ABSTRACT: This paper present a Case Report of a female 26 years old patient, with lip cleft on the right side and lip and palate cleft on the left side, with severe skeletal Class III malocclusion and Goslon 4. After diagnosis, two treatment plans were performed: surgical correction and orthodontic camouflage treatment. Considering the patient's main complaint was facial aesthetics and the severity of the discrepancy, the orthodontic-surgical option was defined as better for the case. During the evolution of orthodontic treatment, the patient declined to undergo the surgical procedure to correct growth disorders. Thus, the treatment is replanned to obtain an improvement in occlusal relationships through dentoalveolar compensation ().

OBJECTIVE: We intend to demonstrate a more conservative orthodontic treatment in an extremely severe malocclusion, obtaining a better relationship between maxilla and mandible, matching the size of the arches, correcting the upper and lower midline, gaining more stable occlusal conditions, with sagittal, transverse and vertical improvement. Also, to show the performance of the multi and interdisciplinary HRAC team in the final aesthetic result.

CONCLUSION: After completing the treatment, a more functional occlusal result was obtained, ending with Class II relationships on the right side and Class I on the left side, rehabilitation with a fixed prosthesis in the cleft area, and improvement in lower lip support and smile aesthetics.



79

DECREASE IN OXYGEN SATURATION IN NUTRITIONAL SUCTION IN CHILD WITH ISOLATED ROBIN SEQUENCE: CASE REPORT

WANDERLEY CMS², Fukushiro AP^{1,2}, Miguel HC¹, Trindade-Suedam IK^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru – FOB/USP, Bauru

OBJECTIVES: To Evaluate The Oxygen Saturation During The Nutritive Sucking Of Breast Milk In A Child With Isolated Robin Sequence, Using High-Resolution Oximetry.

CASE REPORT: L.L.A., Female, 12 Months Old, Diagnosed With Robin Sequence (Rs) With Isolated Incomplete Post-Foramen Cleft E, Underwent An Oximetry Test While Breastfeeding, Which Showed That The Mean Saturation Was 94%, With A Minimum Of 90% And A Maximum Of 98%. In A Total Collection Time Of 12 Minutes, The Baby Interrupted Bottle Feeding 50 Times To Breathe. During The Offer Of The Bottle, The Baby Sounds Considered Abnormal, Like Snoring.

CONCLUSION: Rs Is Characterized By Micrognathia, Glossoptosis And Airway Obstruction And, In A Considerable Number Of Cases, Cleft Palate. Thus, During Feeding, It Was Observed In L.L.A. Decrease In Oxygen Saturation, According To The Pediatric Dysphagia Clinical Assessment Protocol (Almeida, 2014) Due To The Association Of Two Factors: Micrognathia And Cleft Palate. The First Causes An Abnormal Implantation Of The Tongue, Which Assumes A Retroposition Favoring A Partial Resistance To Breathing. The Second Makes It Impossible To Create A Negative Intra-Oral Pressure, Necessary For Suction, In Addition To Causing The Sounds Observed In The Patient During The Measurement.

Financial support: FAPESP



80

DIAGNOSIS, TREATMENT AND EVOLUTION OF A PATIENT WITH CLEFT LIP AND PALATE

SANTOS KG1, Gomes JPF¹, Mariotto LGS¹, Yaedú RYF^{1,2}

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

Orofacial clefts are the most common congenital craniofacial anomalies that affect the human face, their epidemiology in South America is one for every 650 live births. This anomaly has a multifactorial etiology, and may have an environmental cause such as alcohol, stress, exposure to radiation and genetic causes, whether they are associated with syndromes or not. Several researchers over the years have proposed classifications of the types of clefts, but Spina, in 1972, stood out by publishing the classification that has the incisive foramen as its primordial point, which delimits the embryonic formation of maxillary structures considering the evolution of intrauterine life. Being separated into four large groups. From the discovery of the fissure, which may be during intrauterine life or childbirth, until adulthood, the cleft patient is subjected to several surgical procedures and the appropriate time to perform each one is crucial for adequate rehabilitation. In the present case, the female patient, 22 years old, with a left transforamen unilateral fissure, was taken by her parents to the USP Craniofacial Anomalies Rehabilitation Hospital at the age of three months, where she underwent several procedures throughout her life and is currently discharged, validating the importance of the correct diagnosis and treatment of these patients.



81

FAMILIAL CASE OF POPLITEAL PTERYGIUM SYNDROME: OROFACIAL CLEFT VARIABILITY

VIRMOND L¹, Kokitsu-Nakata NM¹, Serigatto HR¹, Zechi-Ceide RM¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

OBJECTIVE: Describe the phenotypic variability of orofacial clefts in a family with popliteal pterygium syndrome (PPS) and a pathogenic variant in IRF6 gene.

CLINICAL REPORT: The mother and her two children with PPS, was evaluated at the Hospital of Rehabilitation of Craniofacial Anomalies (HRAC/USP). They shared the following clinical characteristics: popliteal pterygium, syndactyly and a pyramidal skinfold extending from the base to the top of the nails. In addition, the siblings also had ankyloblepharon, the girl had talipes equinovarus, and the mother had hypoplastic labia majora. Variable orofacial clefts were also observed in the trio and the boy had a Robin sequence (RS), an unusual finding in PPS. Sanger sequencing of exon 4 of the IRF6 gene was performed in the trio and identified the well known pathogenic heterozygous variant, NM_006147.4:c.250C>T;p.(Arg84Cys). This variant has already been described in the literature, and has been associated with the phenotypic spectrum of IRF6-related disorders, including patients with only orofacial clefts, although it is more often correlated with the PPS phenotype.

CONCLUSION: The clinical and molecular findings described are compatible with the PPS diagnosis and highlights the phenotypic variability related to orofacial clefts in IRF6-related disorders. The clinical variability observed in this family corroborates with the phenotypic spectrum of patients with the c.250C>T IRF6 variant. The Robin sequence, observed in the boy, should be considered as a clinical finding of the PPS.

Financial support: Smile Train



82

GENERALIZED HYPERCEMENTOSIS IN A PATIENT WITH HYPOTHYROIDISM AND UNILATERAL CLEFT LIP AND PALATE

PRETO KA¹, Santos GL¹, Ferreira GR², Oliveira DT¹

1. Faculdade de Odontologia de Bauru, Universidade de São Paulo

2. Hospital de Reabilitação de Anomalias Craniofaciais – Universidade de São Paulo

INTRODUCTION: Hypercementosis is a disorder characterized by the atypical deposition of root cementum and may occur in a generalized form involving roots of single-rooted and multi-rooted teeth. Literature shows, its occurrence has been associated with syndromic patients or patients with systemic alterations, such as thyroid disorders, calcium metabolism and bone metabolism.

OBJECTIVE: To present a rare case case of generalized hypercementosis in a patient with hypothyroidism and cleft lip and cleft palate and discuss potencial associations.

CASE REPORT: 20-year-old woman with unilateral cleft lip and palate, sought care at Hospital for Rehabilitation of Craniofacial Anomalies for extraction of unerupted tooth 18. Was detected, in the anamnesis, that the patient was being treated for hypothyroidism and for epilepsy, but still reported breathing difficulty, physical fatigue, weakness and indisposition. In the panoramic radiograph, the presence of radiopaque depositions involving the roots of single-rooted and multirrooted teeth in the maxilla and mandible, altering the typical root anatomy, this pattern is compatible with the diagnosis of generalized hypercementosis. This case report illustrates a rare occurrence of generalized hypercementosis in a patient with cleft lip and palate, probably associated with patient's systemic conditions, such as hypothyroidism.

CONCLUSION: The importance of clinical-radiological correlation for correct diagnosis of alterations involving multiple teeth is concluded. It is also noteworthy that patients with generalized hypercementosis should be investigated for systemic changes, particularly associated with thyroid or bone tissue changes.



83

INTENSIVE SPEECH THERAPY USING CPAP AND VISUAL BIOFEEDBACK OF THE VELOPHARYNX WITH NASOENDOSCOPY - CLINICAL REPORT

PIERIM VIEIRA F¹, Santos JV¹, Brandão GR¹, Bento-Gonçalves CGA¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

OBJECTIVE: Report the evolution during the Intensive Speech Therapy Program (ISTP) for the correction of active errors and systematization of velopharyngeal closure (VPC) in speech using CPAP (Continuous Positive Airway Pressure) and nasoendoscopy (NV).

CASE REPORT: A fifteen years old patient with symptoms of velopharyngeal dysfunction in speech after primary palatal surgery. The diagnosis involved perceptual speech assessment (PSA) with the presence of AAP, audible nasal air emission (ANE), reduced intraoral air pressure and unacceptable mild hypernasality. The nasoendoscopy confirmed the presence of velopharyngeal incompetence with VPC in the blow, /f/, /pa/, /ka/, /fa/ and recommended speech therapy to systematize VPC and eliminate active and passive errors. The ISTP involved 20 sessions, lasting 55 minutes for 10 days.

CONCLUSION: CPAP, Glatzel mirror, silicone tube, therapist model and visual biofeedback with NV were used as facilitating clues. The CPAP was positioned on the nose in the production of syllables, words and phrases with plosive and fricative phonemes, followed by the same emissions with the Glatzel mirror. In the end, the patient achieved VPC in all phonemes, phrases, short texts and some spontaneous speech emissions. In the last visual biofeedback with NV there were consistency in the VPC, with some bubbles in voiced fricatives. Therefore, ISTP associated with CPAP and nasoendoscopy were decisive for the patient's evolution.



84

MANDIBULAR SMYPHYSIS BILATERAL ALVEOLAR BONE GRAFTING

BRAGA BMR¹, Ozawa TO¹, Carvalho RM¹, Leal CR¹

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

OBJECTIVE: To report a clinical case of a patient with complete bilateral cleft lip (CBCL) who underwent alveolar bone grafting (ABG) with autogenous bone from the mandibular symphysis (MS).

CASE REPORT: A 12-year-old female patient with CBCL, deviation of the premaxilla to the right side and presence of vestibular buconasal fistulas (BNF), underwent alveolar bone grafting (ABG) by the maxillofacial surgery team at HRAC-USP. Rapid maxillary expansion prior to ABG was not necessary. The BNFs were closed during the ABG, performed after the irruption of the permanent canines with an autogenous (anterior and marrow) bone from the MS. In the 2-month follow-up, tissue repair was satisfactory: the BNFs remained closed and the aesthetics of the alveolar ridge was restored. Bone formation was sufficient on both sides to stabilize the premaxilla and allow the initiation of orthodontic mechanics. The patient reported total paresthesia on the right side and partial on the left side in the chin region. Although bilateral ABG using MS are rarely described in the literature, the case was well conducted and considered a success because, in addition to bone formation, the BNFs remained closed and the paresthesia is regressing on the right side and reestablished on the left side, according to 4-month follow-up. In conclusion, the success of the bilateral MS ABG was achieved, as it reestablished physiological processes, favored the aesthetics of the alveolar ridge and allowed the installation of an orthodontic appliance.

Financial support: CAPES



85

MTA APICAL PLUG: SUCCESSFUL APPROACH DURING ENDODONTIC REINTERVENTION IN A TOOTH WITH ANATOMICAL COMPLEXITY IN AN AREA OF CLEFT LIP AND PALATE

MENESES JÚNIOR NS¹, Nogueira ACPA², Andrade FB¹, Pinto LC²

1. Bauru School of Dentistry – FOB/USP, Bauru

2. Hospital for Rehabilitation of Craniofacial Anomalies – HRAC/USP, Bauru

OBJECTIVE: To demonstrate the importance and describe the execution of mineral trioxide aggregate (MTA) apical plug in an endodontic reintervention of a large foramen size tooth in a cleft lip and palate area.

CASE REPORT: Male, 24 years old, with bilateral complete cleft lip and palate, attended the HRAC/USP Endodontics sector for evaluation of #21 tooth. Clinically, there was positive response to vertical percussion test and negative response to horizontal percussion and palpation tests. The radiographic examination showed inadequate filling of the root canal, large foramen size and periapical bone rarefaction, indicating the need for endodontic reintervention. Therefore, a coronal opening was performed, followed by absolute isolation, root canal desobturation, irrigation with 2,5% NaOCl, odontometry, hybrid technique preparation, apical stop preparation until file #140, intracanal medication with Calen PMCC and temporary sealing with glass ionomer cement. During obturation stage, due to the large foramen size, an apical plug was made with MTA and, finally, obturation with gutta percha and endodontic sealer. One follow-up per year for two years was carried out, verifying through clinical and radiographic control aspects of normality, with regression of the periapical lesion.

CONCLUSION: The MTA apical plug provides a physical barrier that prevents the filling material from leaking into the cleft area, keeping it within biological limits. This approach, in addition to reducing the inflammatory response caused by the filling material leakage, promotes a biological seal formation through the deposition of mineralized tissue. This treatment allowed the tooth maintenance, which favors aesthetics and subsequent rehabilitation.



86

MULTIPLE ODONTOGENIC KERATOCYSTS RECURRENCE IN A PATIENT WITH NEVOID BASAL CELL CARCINOMA SYNDROME

PRETO KA¹, Santos GL¹, Trindade PAK², Oliveira DT¹

1. Faculdade de Odontologia de Bauru, Universidade de São Paulo

2. Hospital de Reabilitação de Anomalias Craniofaciais – Universidade de São Paulo

INTRODUCTION: The Nevroid Basal Cell Carcinoma Syndrome (NBCCS) or Gorlin syndrome, is an hereditary dominant autosomal disorder where multiple keratocysts are one of the major signs to be considered in its diagnosis.

OBJECTIVE: To present a case report of recurrent multiple odontogenic keratocysts in a patient with NBCCS, highlighting the importance of periodic monitoring of the lesions in these syndromic patients.

CASE REPORT: Male patient, 24 years old, with unilateral transforamen cleft lip and palate on the left side and diagnosis of NBCCS, searched dental care for clinical and imaging control of odontogenic cysts. A cone beam computed tomography scan was performed where hypodense lesions, one well delimited and corticalized in the right maxilla, in contact with the roots of teeth 16, 14 and 15 and the other in the retromolar region of the mandible, adjacent to the roots of tooth 37, with rupture of the cortical bone, were detected. In the same regions, cystic lesions with a diagnosis of odontogenic keratocyst had already been removed. Afterwards, the cystic lesions were removed and the material sent for histopathological analysis. Microscopic analyzes revealed a virtual cystic cavity lined by parakeratinized stratified squamous epithelium with a palisaded basal layer, hyperchromatic nucleus, without epithelial crests and with superficial corrugation, confirming the diagnosis of odontogenic keratocyst recurrence for both lesions.

CONCLUSION: This case report reinforces the need for periodic control of patients with NBCCS, aiming monitoring and early diagnosis of odontogenic cysts, as well as other manifestations of the syndrome.

Financial support: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES – code 001).



87

ODONTOGENIC KERATOCYST ASSOCIATED WITH ASPERGILLOSIS IN A SYNDROMIC PATIENT

VILLELA BERBERT DANIEL A¹, Santos GL¹, Yaedu RYF^{1,2}, Oliveira DT¹

1. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

2-Hospital de Reabilitação de Anomalias Craniofaciais-HRAC/USP, Bauru

OBJECTIVE: The aims of this case report is to describe an unusual manifestation of odontogenic keratocyst associated with aspergillosis in a syndromic patient.

CLINICAL REPORT: A 43 years-old female patient with Gorlin-Goltz syndrome, was referred to the Rehabilitation Hospital of Craniofacial Anomalies for evaluation an intraosseous maxillar lesion. The cone beam computed tomography showed a hypodense and well-delimited lesion in the region of teeth 24 to 27, in continuity and compressing the lateral wall of the maxillary sinus, measuring approximately 4 cm in diameter. The enucleation of the lesion was performed, and during the surgery, a blackened mass of soft tissue with firm consistency, located within the maxillary sinus adjacent to the intraosseous lesion was found. The surgical specimens were sent for histopathological analyses. Microscopically, a cystic cavity lined by parakeratinized stratified squamous epithelium with surface corrugations, palisaded and hyperchromatic basal cells, without epithelial ridges and clefts separating the epithelium from the connective tissue was observed. The material taken from the maxillary sinus had hyphae septate, tubular and branched at 45 degrees, compatible with *Aspergillus* sp., interspersed with necrotic areas and bacterial colonies peripherally. The established diagnosis was odontogenic keratocyst associated with aspergillosis.

CONCLUSION: Although the occurrence of odontogenic keratocyst is part of the clinical manifestations in Gorlin-Goltz syndrome, your association with opportunistic fungal infections such as aspergillosis isn't common. Thus, the periodic follow-up of patients with Gorlin-Goltz syndrome is important for the early diagnosis of its clinical manifestations maintaining a better quality of life for patient.



OROFACIAL MYOFUNCTIONAL DISORDERS SECONDARY TO FRONTONASAL DYSPLASIA AND CLEFT LIP AND PALATE: CLINICAL CASE REPORT

MELLO LLN¹, Medeiros-Santana MNL¹

1. Universidade Federal de Sergipe - UFS, Lagarto/SE

OBJECTIVE: Frontonasal dysplasia (FND) is a malformation, whose clinical characteristics result in midline craniofacial defects. Depending on the severity of those manifestations, individuals with DFN may present significant disorders of the stomatognathic system (SS). This study aimed to describe the orofacial myofunctional disorders (OMD) observed in a patient diagnosed with DFN and cleft lip and palate (CLP) served on an Outpatient Clinic of a Brazilian public university.

CLINICAL REPORT: A 18-year-old female, diagnosed with DFN followed by hypertelorism, median facial cleft affecting the nose, repaired unilateral CLP and complaints regarding chewing and speech articulation, underwent an orofacial myofunctional assessment. We observed lips occluded at rest with excessive contraction of the mental muscle and fibrous scar; tongue with post-frenectomy fibrosis and reduced mobility; upper and lower dental arches with dental failures; ectopic tooth eruption, overjet; hard palate with fibrosis, atresic and ogival; short soft palate, posterior levator veli palatini insertion with regular mobility; reduced nasal airflow and mild asymmetry between nostrils; absence of labial occlusion during chewing, lateral incision of food with an increase in its ingesta volume, increased chewing speed; swallowing with compensatory movements of head; moderate hypernasality, audible nasal air emission, distortion of linguoalveolar phones, compensatory articulations on high pressure phones.

CONCLUSION: The patient presents OMD related to posture and mobility of orofacial structures and to all stomatognathic and velopharyngeal functions. Knowing the repercussions of DFN associated with CLP on the SS is essential to outline the appropriate therapeutic planning that results in the success of the interdisciplinary treatment.



89

ORTHODONTIC TREATMENT IN A PATIENT WITH ROBINOW SYNDROME – CASE REPORT

DE OLIVEIRA LNM¹, Dalben GS¹, Boca AC¹, Das Neves LT^{1,2}, Porto Peixoto A¹

1. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

OBJECTIVES: The aim of this study is to report the stages of orthodontic treatment, from the diagnosis, planning and case finalization carried out in a patient with Robinow syndrome.

CASE REPORT: A 7-year-old patient was diagnosed with Robinow Syndrome by the genetics sector of the Hospital for Rehabilitation of Craniofacial Anomalies (HRAC). In the initial examination, the following characteristics were present: prominent forehead, hypertelorism, hypoplasia of the columella, anteverted nostrils, large mouth, elongation of the distal phalanges of the digits. She was referred to the HRAC division of dentistry, after radiographic examinations were diagnosed: agenesis of teeth 15 and 12, microdontia of tooth 22 and impaction of 47 by the germ of 48. In addition, she had retention of deciduous teeth and gingival hyperplasia that were treated in the pediatric dentistry and periodontics sectors, respectively. In the follow-up, the sectors of orthodontics and oral and maxillofacial surgery proposed the correction of malocclusion with orthodontics by the installation of braces and subsequent installation of orthodontic mini implants, in addition to the extraction of the microdontia (22) and third molars (18, 28, 38 and 48) and esthetic harmonization of maxillary canines into lateral incisors. Complementing the orthodontic treatment, the craniofacial surgery team performed rhinoseptoplasty and columella lengthening.

CONCLUSION: The treatment ended satisfactorily at the age of 20. Three years after the end of the treatment, the patient returned to the HRAC and success was confirmed, since the treatment remained stable.



90

ORTHOGNATHIC SURGERY OF A PATIENT WITH UNILATERAL CLEFT LIP AND PALATE: CASE REPORT

GOMES JPF¹, Yaedu RYF^{1,2}, Barcellos BM¹, Mello MAB¹

1. Faculdade de Odontologia de Bauru-FOB/USP, Bauru

2. Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

AIM: Cleft lip and palate are the most common birth defects among the malformations that affect the human face. The condition is multifactorial and varies between genetic and environmental. The rehabilitation process of these patients requires various stages, extending throughout their lives. The treatment is multidisciplinary and integrated following the stages of growth. The surgeries performed since in the first months of life, as cheiloplasty and palatoplasty, form tissue fibrosis, which directly affects the development of the maxillomandibular complex. Therefore, orthognathic surgery is necessary to aesthetically and functionally correct these bone discrepancies. Aim: Hence, the aim of this study is to report the treatment of patient non-syndromic patient with unilateral transforamen cleft lip and palate submitted to orthognathic surgery to correct Class III malocclusion, performed at HRAC-USP.

CASE REPORT: Patient, man, 29 years old, underwent Le fort I osteotomy and Bilateral Sagittal Mandibular Osteotomy to correct the skeletal discrepancy, with maxila was advancement and mandibular setback. No significative events occurred during the imediate postoperative period. One year later, the patient has stable occlusion and is finishing orthodontic treatment. Also, the speech was not impaired. Orthognathic surgery allows the correction of bone discrepancies, thus being able to provide the patient with both an aesthetic and functional improvement, optimizing their quality of life.



91

PATHOGENIC VARIATION IN SMCHD1 CAUSING ARHINIA: A MILD FORM OF BOSMA ARHINIA MICROPHthalmia SYNDROME?

SEGARRA VCD¹, Tonello C¹, Alonso N¹, SHAW N², Kokitsu-Nakata NM¹, Zechi-Ceide RM¹

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. National Institute of Environmental Health Sciences (NIEHS)

OBJECTIVE: Describe an isolated case of Bosma Arhinia Microphthalmia Syndrome (BAMS) with SMCHD1 variation.

CLINICAL REPORT: The case is a young Brazilian girl, from HRAC/USP, born in 2003, of a healthy 28-year-old woman and 30-year-old man. She was born at term by normal birth. It was reported tobacco exposure until the second month of gestation and liquid loss at 8 months, furthermore, she was born cyanotic and needed orotracheal intubation during 15 days. Clinical genetics evaluation at the age of 2 months showed weight of 2.650g (3rd-10th centile), length of 52cm (<3rd centile), hypertelorism, absence of nasal structure (arhinia), maxillary hypoplasia, Robin sequence (micrognathia and glossoptosis) and severe respiratory obstruction. Surgery nasal reconstructions was performed by craniofacial team from HRAC/USP at ages 7 and 13 years old. Routine exams showed low Follicle Stimulating Hormone (FSH), Luteinizing Hormone (LH) and Growth Hormone (GH). Genetic investigation presented normal Karyotype (46,XX) and whole exome sequencing with presence of a heterozygous variant in the SMCHD1 gene (c.404G>A); p. (Ser135Asn). This specific missense variant was previously reported on ClinVar and it was classified as pathogenic based to ACMG standard, Uniprot, and Varsome. It is known that the SMCHD1 plays a role in DNA regulation and alterations in this gene can cause BAMS, a syndrome with variable clinical manifestations, which mainly presents arhinia, microphthalmia and hypogonadism.

CONCLUSION: SMCHD1 alteration present in this case results in a variable physical and physiological aspects, compatible with an incomplete BAMS phenotype, but nose alterations seems to be the protagonist.

Financial support: Smile Train



92

PRE-SURGICAL ORTHOPEDICS IN COMPLETE UNILATERAL CLEFT OF THE LIP, ALVEOLUS AND PALATE PREVIOUSLY CHEILOPLASTY USING THE FISHER TECHNIQUE. CASE REPORT

GUANOLUIZA LA¹, Olmedo S², Vaca M¹

1. Facultad de Odontología de la Universidad de los Hemisferios-FOH/UHE, Quito

2. Hospital Pediátrico Baca Ortiz – HPBO/MSP, Quito

OBJECTIVE: The use of the NAM pre-surgical orthopedic appliance allows us to align the alveolar segments and reduce the width of the cleft to facilitate cheiloplasty, guide the growth of the segments into which the maxilla is divided, improve lingual function and shape the jaws. nasal cartilages and the comumella. The purpose of this study was to report the use of the maxillary orthopedic device in a patient with FLAP in (HPBO-MSP).

CASE REPORT: 6-month-old female patient with a diagnosis of unilateral cleft lip and palate, with no relevant history. The case where the patient shows child malnutrition and presented a blocked plate is analyzed, the NAM pre-surgical orthopedics protocol was carried out, made of self-curing acrylic and stainless steel wire that goes from the plate to the nose, the retention arms were placed adapting to the patient, with the help of Micropore-type adhesive tapes for 3 months that was gradually adjusted. Six months after complying with the rule of 10, unilateral labiaplasty was performed with the Fisher technique. It was decided to start with a Castillo-Morales plate for three months and is currently continued with a palatal obturator plate and nasonasal modeler, pending surgical management for palatoplasty in a multidisciplinary team made up of Nutrition and Maxillofacial Surgery.

CONCLUSION: The initial orthopedic treatment in patients with cleft lip and palate should use the nasoalveolar orthopedic device in order to offer surgical, aesthetic and functional results prior to cheiloplasty.



93

STEP-BY-STEP ORAL REHABILITATION THROUGH LOWER IMPLANT-SUPPORTED PROSTHESIS FOR OVERDENTURE IN A PATIENT WITH CLEFT LIP AND PALATE

COSTA LPG¹, Lopes JFS¹, Tavano RD¹, Pinto JHN¹, Amado FM¹, Azevedo RMG¹, Lopes MMW¹, Soares S^{1,2}, Mazzo A^{1,2}

1. Hospital for Rehabilitation of Craniofacial Anomalies, HRAC-USP; Bauru

2. Bauru School of Dentistry - FOB/USP, Bauru

OBJECTIVE: To report the clinical steps of oral rehabilitation through an implant supported prostheses in the mandible in a patient with cleft lip and palate.

CLINICAL REPORT: Patient G.S.A., male, 63 years old, with congenital cleft, attended the Dental Prosthesis sector of the Hospital for Rehabilitation of Craniofacial Anomalies (HRAC/USP) with a complaint in the lower dental arch. In the clinical examination, a fixed partial prosthesis on implants (in the region from 45 to 47) was in good condition, lower teeth with mobility and with indications for extractions. After oral adequacy and planning through tomography examination, nine lower teeth were extracted, three implants were installed in the region of 31, 41 and 36 and the adaptation of the lower provisional dental plate. After six months, the reopening of the implants was carried out, as well as the sequences of the clinical steps for the manufacture and installation of the inferior metaloplastic protocol prosthesis. According to the literature, implant-supported prosthetic treatment can contribute to the masticatory efficiency and quality of life of the individual, improving the aesthetic, physical and psychosocial aspect.

CONCLUSION: Oral rehabilitation using the protocol prosthesis was fundamental in the safety and harmonization of the cleft patient's smile, in addition to favoring the balance of the structures of the stomatognathic system.

Financial support: CAPES (Process 88887.645866/2021-00)



94

THE CHALLENGES OF MULTIDISCIPLINARY REHABILITATION OF A PATIENT WITH UNILATERAL CLEFT LIP AND PALATE: A CASE REPORT

MARINHO BARCELLOS B¹, Toledo Teixeira da Silveira I², Sanches Mariotto LG¹, Yassutaka Faria Yaedú R¹

1- Hospital de Reabilitação de Anomalias Craniofaciais - HRAC/USP, Bauru

2- Faculdade de Odontologia de Bauru-FOB/USP, Bauru

AIM: Report and discuss the treatment of a girl with right unilateral cleft lip and palate.

CASE REPORT: The patient underwent cheiloplasty and palatoplasty at 3 and 12 months of age, respectively. But years later, she had to undergo secondary anterior and posterior palatoplasty to correct the fistulas caused by flap necrosis after the primary palatoplasty. At the age of 5, she was diagnosed with bilateral hearing loss due to recurrent otitis. The secondary bone graft failed and at the age of 10, she started orthodontic treatment, because of severe maxillomandibular discrepancy (Goslon V) and posterior crossbite. The Class III pattern progressed with growth, in addition to the worsening of the maxillary atresia with collapse of the segments. The following surgeries were delayed because she presented with bilateral chronic mastoiditis, that needed treatment. Orthognathic surgery with maxila segmentation and advancement and mandibular setback was performed, at the age of 19. Two years later, the patient presented extensive oronasal fistula, loss of the anterior teeth and persistent bilateral posterior crossbite, but with stable occlusion. Then, a palate obturator prosthesis with speech bulb and anterior teeth for rehabilitation was installed.

CONCLUSION: Although the velopharyngeal dysfunction impaired speech intelligibility, even with the presence of the palate prosthesis, occlusal stability, functional mastication and a esthetic result were achieved. This case shows that the interdisciplinary treatment of cleft lip and palate patients can be a great challenge due to the case peculiarities. Therefore, the treatment must be individualized and each decision very well studied.



95

TREATMENT OF VERTICAL EXCESS OF PREMAXILLA IN BILATERAL CLEFT LIP AND PALATE PATIENT: CASE REPORT

RABELO IBM¹, Aguiar ALM¹, Olsson B², Sebastiani AM^{2,3}, Kluppel LE^{2,3}, Scariot R^{2,3}

1. Universidade de Maringá – UniCesumar, Maringá

2. Universidade Federal do Paraná – UFPR, Curitiba

3. Centro de Atenção Integral à Fissura Labiopalatina, Hospital do Trabalhador, CAIF/HT, Curitiba

OBJECTIVE: To report a treatment of vertical excess of the premaxilla in a patient with bilateral cleft lip and palate, operated by the Oral and Maxillofacial team at Integral Care Center for Cleft Lip and Palate (CAIF).

CASE REPORT: Patient M.A.S.M.M., male, 9 years old, with bilateral cleft lip and palate. The patient underwent cheiloplasty, primary and secondary palatoplasty and orthodontic treatment. The patient was referred to the Oral and Maxillofacial Surgery Service with aesthetic and functional complaints. In extraoral exam, it was possible to observe lack of lip seal, exposure of the entire crown of the central incisors and exposure of 1.1 cm of attached gingiva. In the intraoral exam, an accentuated overbite was observed due to the presence of two superior occlusal planes, dental misalignment and non-coordination of the dental arch. Computed tomography with three-dimensional reconstruction was performed and the surgery was planned using software to build a final splint. Based on the general finds, the treatment plan was defined as impaction of the premaxilla and grafting, under general anesthesia. The segments were fixed with a plate and screw and dental splinting was maintained for three months. Six months after surgery the synthesis material was removed and the patient is undergoing follow-up orthodontic treatment, with significant improvement in his aesthetic and functional complaint. The patient and his parents declared an improvement in personal relationships at school, improvement in diction, nutrition and psychological profile.

CONCLUSION: The case was avoided and the treatment improved the patient's quality of life.



REVISÕES SISTEMÁTICAS



96

FACTORS ASSOCIATED WITH ADHERENCE TO BREASTFEEDING IN INFANTS WITH OROFACIAL CLEFT: SCOPE REVIEW

BATISTA NT¹, Antonio CT¹, Farinha FT¹, Bom GC¹, Manso MMFG¹, Trettene AS¹

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

OBJECTIVE: to identify factors associated with adherence to breastfeeding of infants with orofacial cleft.

METHOD: scope review, developed and structured based on the Joanna Briggs Institute and PRISMA-ScR guidelines. Based on the mnemonics that considered Population, Context and Concept, the following research question was formulated: what factors are associated with adherence to breastfeeding in infants with orofacial cleft? The consulted databases were: PubMed, CINAHL, Web of Science, SCOPUS, EMBASE and LILACS, and the descriptors: breastfeeding, cleft lip and cleft palate. Publications from 2017 to 2021 were included, available in full, regardless of language, which contemplated the concept of breastfeeding recommended by the World Health Organization, children aged between zero and 24 months, with orofacial cleft (lip, palate or lip and palate) not syndromic. Gray literature is excluded.

RESULTS: the initial search resulted in 269 articles. After applying the inclusion criteria, 54 remained for reading in full. Of these, 12 made up the final sample.

CONCLUSIONS: Factors associated with adherence to breastfeeding included: the anatomical complexity of the fissure, pre and postnatal guidance/training, desire to breastfeed, previous experience, knowledge of the benefits of breastfeeding, use of a feeding tube, social and family support, and professional, milking and offer for tools and precocious cheiloplasty. In summary, health professionals can act to encourage the practice of breastfeeding in children with orofacial clefts, as most factors associated with adherence are interconnected and are subject to interventions.



97

MATERNAL FACTORS ASSOCIATED WITH THE ONSET OF OROFACIAL CLEFTS IN THE NEWBORN

AGUIAR ALM¹, Rabelo IBM¹, Oliveira BMB², Freitag IH²

1. Acadêmico do curso de Odontologia, Unicesumar, Maringá-PR

2. Professor do Departamento de Odontologia, Unicesumar, Maringá-PR

OBJECTIVES: To evaluate the appearance of orofacial fissures (OF) according to the health of pregnant women.

METHODS: A systematic literature review was carried out using Pubmed and BIREME databases. The following terms were considered: "cleft lip", "congenital anomalies" and "pregnancy". A total of 20 articles were found, however, only 3 were selected following the inclusion criteria: articles wrote in English and Portuguese; published between 2013 and 2023; references compatible with the terms used for the search. The exclusion criteria were: articles indexed in other languages; not related to the theme; paid and published before 2013.

RESULTS: OF are malformations characterized by lack of fusion of the upper lips, upper alveolar ridge and palate. However, the health of the pregnant woman may increase the risks of the appearance of clefts in the fetus. Worldwide incidence was 0.70 to 1.91 cases per thousand births. Alcohol, tobacco, hypovitaminosis (folic acid) and drugs (benzodiazepines, anticonvulsants, antidepressants) are considered factors for the appearance of this anomaly. Studies indicate that alcohol has a higher risk factor than smoking, due to its teratogenic effect (substance with high potential to cause physical and functional changes in the embryo). Furthermore, diabetes mellitus has a high potential for the development of craniofacial anomalies in the fetus.

CONCLUSION: Drug use is 3 times more likely to cause OF and related anomalies during pregnancy. Early diagnosis of diabetes and prevention of drug use in prenatal care should be emphasized by health professionals in order to improve the quality of life of these patients.



98

ORAL REHABILITATION IN PATIENTS WITH PALATE PROSTHESIS: SYSTEMATIC REVIEW

NEVES MC¹, Panigali OA², Nogueira JHP¹, Santiago JFJ²

1. Hospital de Reabilitação de Anomalias Craniofaciais – HRAC/USP, Bauru

2. Unisagrado, Bauru

OBJECTIVE: Perform a systematic review to evaluate the longevity of oral rehabilitation with palate prostheses in patients with cleft lip and palate and velopharyngeal dysfunction.

METHODS: The research group was composed of specialists in the area who work at the Hospital for Rehabilitation of Craniofacial Anomalies – Bauru and Unisagrado - Bauru. For data collection, a detailed search was carried out in the main databases (Medline/PubMed; Cochrane Library; EMBASE; SciELO; Scopus; DOSS and Web of Science) for articles published until July 2021.

RESULTS: the main results indicated an increase of patient satisfaction 72.5% (95%CI: 40.1-91.2) and improvement in function activities. More longitudinal follow-up studies are needed in patients with cleft maxilla and users of obturator prostheses.

CONCLUSION: Palate obturator prostheses allowed improvement in patient satisfaction and in functional/aesthetic activities, making it necessary for these rehabilitation treatments to be carried out in multidisciplinary environments in order to restore function and increase the quality of life of these patients.



ÍNDICE • POR TÍTULO



3D Tomographic assessment of the pharyngeal airway in adults with Robin Sequence. *SCOMPARI L, Ribeiro AA, Noel M, Trindade-Suedam IK* [01] • p.16

3D Upper airway tomographic assessment of adolescents and adults with Treacher Collins Syndrome. *DOS INOCENTES RJM, Marzano-Rodrigues MN, Yatabe-Ioshida MS, Ribeiro AA, Trindade-Suedam IK* [02] • p.17

A novel missense variant P.SER118ARG in EFN1 causing ocular hypertelorism and cleft lip and palate in a boy and craniofrontonasal syndrome phenotype in his mother. *GALVANIN AL, Kokitsu-Nakata NM, Vendramini-Pittoli S, Zechi-Ceide RM* [71] • p.88

Aesthetic-functional rehabilitation with orthognathic surgery in a patient with cleft lip and palate. *GRINGO CPO, Barcellos BM, Mello MAB, Yaedú RYF* [72] • p.89

AleitaCleft: Construction of a website regarding breastfeeding in infants with orofacial cleft. *BATISTA NT, Antonio CT, Bom GC, Manso MMFG, Trettene AS* [03] • p.18

Alveolar bone graft and nursing care in the pre and post operative. *SOUZA AMS, Almeida ALPF* [04] • p.19

Analysis of masticatory function and its relationship with the nutritional status of individuals with Treacher Collins Syndrome. *MEDEIROS LH, Silva LVF, Bueno PM, Barros SP, Fukushima AP, Trindade-Suedam IK* [55] • p.71

Assessment of the internal nasal dimensions of individuals with cleft lip and/or palate and obstructive sleep apnea by computed tomography. *LOUREIRO NB, Marzano-Rodrigues MN, Trindade-Suedam IK, DAquino A, Trindade SHK* [05] • p.20

Baraitser-Winter Cerebrofrontofacial Syndrome: An additional Brazilian case report. *SERIGATTO HR, Kokitsu-Nakata NM, Di Donato N, Guion-Almeida ML, Zechi-Ceide RM* [73] • p.90

Bimaxillary orthognathic surgery in a patient with unilateral cleft lip and palate – Case report. *CASTRO-MERAN AP, Carvalho LRA, Mariotto LGS, Mello MAB, Ferreira Junior O, Yaedú RYF* [74] • p.91

Bite force of individuals with cleft lip and palate before and after orthognathic surgery. *BUENO PM, Medeiros LH, Fidelis Da Silva LV, Trindade PAK, Trindade-Suedam IK* [06] • p.21

Bite force, masticatory performance, and its relationship with the nutrition of adult individuals with Treacher Collins Syndrome. *MEDEIROS LH, Silva LVF, Bueno PM, Barros SP, Trindade-Suedam IK* [07] • p.22

Breastfeeding in infants with orofacial cleft: validation of a website. *BATISTA NT, Antonio CT, Farinha FT, Bom GC, Manso MMFG, Trettene AS* [08] • p.23

Can hypodontia associated with non-syndromic oral cleft influence familial recurrence for clefts? *FARHA ALH, Neves LT* [09] • p.24

Canine eruption pathway after alveolar grafting with different materials in patients with complete UCLP. *BRAGA BMR, Leal CR, Carvalho RM, Bernardes DG, Ozawa TO* [10] • p.25



ÍNDICE • POR TÍTULO (continuação)

- Challenges of severe discrepancies in orthognathic surgery: Case report. **DIAS RS, Silveira ITT, Mello MAB, Mariotto LGS, Yaedú RYF [75] • p.92**
- Characteristics of long-term average spectra at the different degrees of hypernasality. **PREARO GA, Farha A, Marino VCC, Pegoraro-Krook MI, Dutka JCR [11] • p.26**
- Classification of pterygomaxillary suture after Le Fort I osteotomy in cleft patients using cone beam computed tomography. **SILVEIRA ITT, Reis LAC, Barcellos BM, Yaedú RYF [56] • p.72**
- Clinical findings related to altered speech intelligibility after orthognathic surgery in patients with cleft lip and palate. **SILVA MLC, Silva ASC, Araújo BMAM, Fukushima AP [57] • p.73**
- CLP and craniofacial anomalies in Santa Cruz de La Sierra, Bolivia. Challenges for a rehabilitation team. **MEDRANO-GUTIERREZ A, Yaedú RYF, Miranda S, Mendes P, Ferreira O, Dalben GS [76] • p.93**
- Cochlear implant in ossified cochleas. **ADAM FRAGA G, Zabeu JS, Lourençone LFM [12] • p.27**
- Cognitive performance in six brazilian male with Optiz GBBB Syndrome and pathogenic variation in the MID1 gene. **RAFACHO MB, Siemann ME, Serrão VT, Kokitsu-Nakata NM, Almeida MLG, Miotto EC, Zechi-Ceide RM [13] • p.28**
- Complex treatment of siblings with Van Der Woude Syndrome. **BERNARDES DG, Braga BMR, Peixoto AP, Kokitsu-Nakata NM, Ozawa TO [77] • p.94**
- Conservative orthodontic treatment of severe skeletal Class III malocclusion in a patient with lip and palate cleft: a case report. **RUFINO SS, Penhavel RA [78] • p.95**
- Decrease in oxygen saturation in nutritional suction in child with isolated Robin Sequence: case report. **WANDERLEY CMS, Fukushima AP, Miguel HC, Trindade-Suedam IK [79] • p.96**
- Diagnosis, treatment and evolution of a patient with cleft lip and palate. **SANTOS KG, Gomes JPF, Mariotto LGS, Yaedú RYF [80] • p.97**
- Education in right of people with craniofacial anomaly: The role of the health professional. **RALA ETL, Dutka JCR [14] • p.29**
- Evaluate of bone graft and bone regrant to dental implants installation in the cleft area. **GONÇALES MG, Almeida ALPF [15] • p.30**
- Evaluation of the impact of alveolar bone graft surgery on the nasal internal dimensions of individuals with cleft lip and palate using computed tomography. **NASCIMENTO MLB, Loureiro NB, Rodrigues MNM, Trindade-Suedam IK, Trindade SHK [58] • p.74**
- Evaluation of the types of sphenoid sinus in patients with cleft lip and palate cone beam computerized tomography: Partial results. **GRINGO CPO, Yaedú RYF [16] • p.31**
- Executive functions and coping in people with cleft lip and palate. **MOTTA ND, Ferreira FR, Silva ES, Tabaquim MLM, Pegoraro-Krook MI, Dutka JCR [17] • p.32**
- Factors associated with adherence to breastfeeding in infants with orofacial cleft: scope review. **BATISTA NT, Antonio CT, Farinha FT, Bom GC, Manso MMFG, Trettene AS [96] • p.114**



ÍNDICE • POR TÍTULO (continuação)

- Familial case of Popliteal Pterygium Syndrome: orofacial cleft variability. **VIRMOND L, Kokitsu-Nakata NM, Serigatto HR, Zechi-Ceide RM [81] • p.98**
- Follow-up for 6 years two treatment protocols in the palate of children with orofacial cleft. **SILVEIRA ABV, Ambrosio ECP, Jorge PK, Peixoto YCTM, Carrara CFC, Machado MAAM, Oliveira TM [18] • p.33**
- Generalized hypercementosis in a patient with hypothyroidism and cleft lip and palate. **PRETO KA, Santos GL, Ferreira GR, Oliveira DT [82] • p.99**
- GestaCleft: Construction of a website with information for pregnant women of babies orofacial fissure. **BOM GC, Batista NT, Mondini CCSD, Paccola SAO, Trettene AS [19] • p.34**
- Gestational diabetes mellitus and high-risk pregnancy supervision in the São Paulo state during 2012 to 2022. **ALVES DE SOUZA L, Farina Puntel L, Silva Araújo E, Negrato CA, Freitas-Alvarenga K [20] • p.35**
- Health communication as an instrument of promotion, protection and recovery of health of the person with cleft lip and palate. **CEZAR T, Oliveira JL, Tomasevicius Filho E, Dutka JCR [21] • p.36**
- Humanization in times of the Covid-19 pandemic: a more than essential relationship. **BUSQUETI JVS, Braga BMR, Bachega MI, Almeida ALPF [22] • p.37**
- Identification of the hypodine velopharynx in cleft palate. **MELO DA SILVA C, Pegoraro-Krook MI [59] • p.75**
- Impact of low-level laser therapy on early orofacial sensitivity recovery after orthognathic surgery. **ALMEIDA CBP, Junqueira ATF, Bastos Junior JCC, Carvalho RM, Yamashita RP [23] • p.38**
- Impact of the Covid-19 pandemic on surgical treatment in patients with cleft lip and palate. **FARINA PUNTEL L, Almeida DMBM, Araújo ES, Alvarenga KF [24] • p.39**
- Incidence of Covid-19 in adult individuals with cleft lip and palate enrolled at HRAC-USP. **RUIZ SIMÃO L, Ferreira dos Santos C, Santiago Junior JF, Garcia-Usó M, Trindade-Suedam IK [25] • p.40**
- Intensive speech therapy using CPAP and visual biofeedback of the velopharynx with nasoendoscopy – Clinical report. **PIERIM VIEIRA F, Santos JV, Brandão GR, Bento-Gonçalves CGA [83] • p.100**
- Investigation of urinary disorders in patients with craniofacial abnormalities: a scope review. **SANTOS GX, Mazzo A [26] • p.41**
- Judicialization involving demands for treatment of craniofacial abnormalities: fissures and syndromes with associated fissures. **COSTA SR, Machado MAAM [27] • p.42**
- Legislation that recognize CLP as a condition that can cause disability in Brazil. **CEZAR T, Regini VBG, Tomasevicius Filho E, Dutka JCR [28] • p.43**
- Mandibular symphysis bilateral alveolar bone grafting. **BRAGA BMR, Ozawa TO, Carvalho RM, Leal CR [84] • p.101**
- Manual for pharyngeal bulb molding during nasoendoscopy. **ANDRADE LKFA, Dutka JCR, Pinto MDB, Whitaker ME, Sousa OMV, Lopes MMV, Aferri HC, Pegoraro-Krook MI [29] • p.44**
- Masticatory function in individuals with complete unilateral cleft lip and palate submitted to bimaxillary orthognathic surgery: Preliminary results. **BUENO PM, Medeiros LH, Fidelis Da Silva LV, Trindade PAK, Trindade-Suedam IK [30] • p.45**



ÍNDICE • POR TÍTULO (continuação)

- Maternal factors associated with the onset of orofacial clefts in the newborn. **AGUIAR ALM, Rabelo IBM, Oliveira BMB, Freitag IH [97] • p.115**
- Middle ear and hearing in cleft lip and palate: long term outcomes. **SOUZA AG, Antoneli MZ, Dutka JCR [31] • p.46**
- Molluscum contagiosum virus endogenous viral elements found in human genetics sequences associated with orofacial clefts. **MESSIAS TS, Silva KCP, Soares S [32] • p.47**
- MTA Apical Plug: Successful approach during endodontic reintervention in a tooth with anatomical complexity in an area of cleft lip and palate. **MENESES JÚNIOR NS, Nogueira ACPA, Andrade FB, Pinto LC [85] • p.102**
- Multiple odontogenic keratocysts recurrence in patient with nevoid basal cell carcinoma Syndrome. **PRETO KA, Santos GL, Trindade PAK, Oliveira DT [86] • p.103**
- Nasal patency after orthognathic surgery in individuals with cleft lip and palate: a review of 523 cases at a tertiary hospital in Brazil. **SEIXAS DR, Maia SES, Yamashita RP, Silva ASC, Araújo BMAM, Fukushima AP [33] • p.48**
- Nasopharyngeal morphometry in adults with cleft lip/palate and obstructive sleep apnea: analysis by cone beam computed tomography and 3D reconstruction. **DAQUINO A, Rodrigues MN, Loureiro NB, Trindade-Suedam IK, Trindade SHK [34] • p.49**
- Non-syndromic cleft palate: pattern of family occurrence. **SILVA CM, das Neves LT [35] • p.50**
- Odontogenic keratocyst associated with aspergillosis in a syndromic patient. **VILLELA BERBERT DANIEL A, Santos GL, Yaedú RYF, Oliveira DT [87] • p.104**
- Oral rehabilitation in patients with palate prosthesis: Systematic review. **NEVES MC, Panigali OA, Nogueira JHP, Santiago JFJ [98] • p.115**
- Orofacial myofunctional disorders secondary to frontonasal dysplasia and cleft lip and palate: clinical case report. **MELLO LLN, Medeiros-Santana MNL [88] • p.105**
- Orthodontic treatment in a patient with Robinow Syndrome – Case report. **DE OLIVEIRA LNM, Dalben GS, Boca AC, Das Neves LT, Porto Peixoto A [89] • p.106**
- Orthognathic surgery of a patient with unilateral cleft lip and palate: Case report. **GOMES JPF, Yaedú RYF, Barcellos BM, Mello MAB [90] • p.107**
- Outcomes of alveolar graft associated with premaxillary osteotomy performed with RHBMP-2 versus iliac bone. **RESENDE LEAL C, Rocha LA, Carvalho RM, Facó RAS, Alonso N, Ozawa TO, Tonello C [36] • p.51**
- Pathogenic variation in SMCHD1 causing arhinia: a mild form of Bosma Arhinia Microphthalmia Syndrome? **SEGARRA VCD, Tonello C, Alonso N, Shaw N, Kokitsu-Nakata NM, Zechi-Ceide RM [91] • p.108**
- Perception of health professionals working in a tertiary hospital regarding the patient safety climate. **CARVALHO PVS, Gazola M, Matiole CR, Trettene AS [37] • p.52**
- Perception of the nursing team at a rehabilitation hospital for craniofacial anomalies regarding patient safety. **MATIOLE CR, Manso MMFG, Bom GC, Carvalho PVS, Trettene AS [38] • p.53**
- Pharyngeal bulb reduction program in individuals with cleft palate. **PEGORARO-KROOK MI, Aferri HC, De Souza**



ÍNDICE • POR TÍTULO (continuação)

- OMV, Lopes MMW, Whitaker ME, Pinto MDB, Marino VCC, de Andrade LKF, Draghi LA, Fukushima AP, Dutka JCR [39] • p.54
- Pharyngeal bull reduction program in individuals with cleft palate: linear measurements. AFERRI HC, Souza OMS, Lopes MW, Siecola MW, Pinto MDB, Dutka JCR, Pegoraro-Krook MI [40] • p.55
- Pharyngeal obturator prosthesis in children with cleft lip and palate in the primary dentition. PETRONI VBP, Aferri HC, Lopes MMW, Dutka JCR, Pegoraro-Krook MI [60] • p.76
- Phonoaudiological assessment in patients after palatoplasty and clinical correlation. MOURA LB, Antoneli MZ, Santos ACA, Ruiz DMCF, Alonso N [41] • p.56
- Photobiomodulation in patients with cleft lip and palate undergoing orthognathic surgery – Analysis with infrared thermography. SANTOS CCV, Almeida ALPF [61] • p.77
- Potential impacts of the Covid-19 pandemic on the social communication and pragmatic skills of children with cleft lip and palate. RONDINA IS, Dutka JCR, de Souza OMV, Pegoraro-Krook MI [62] • p.78
- Pre and post-surgical orthopedics on dental arches of children with cleft lip and palate: comparison between protocols at the first year of life. MELLO-PEIXOTO YCT, Ambrosio ECP, Cerón-Zapata AM, López-Palacio AM, Jorge PK, Silveira ABV, Carrara CFC, Machado MAAM, Oliveira TM [42] • p.57
- Pre-surgical orthopedics in complete unilateral clef of the lip, alveolus and palate previously cheiloplasty using the Fisher Technique. Case report. GUANOLUIZA LA, Olmedo S, Vaca M [92] • p.109
- Prevalence of obstructive sleep apnea in children with Robin Sequence and operated cleft palate: polysomnographic evaluation. BANHARA FL, Sena LMF, Trindade-Suedam IK, Trindade SHK, Trindade IEK [43] • p.58
- Prevalence of sleep breathing disorders in individuals with chromosome 22q11.2 Deletion Syndrome and its relationship with cardiorespiratory capacity. SPILARI S, Zechi-Ceide RM, Kokitsu-Nakata NM, Trindade-Suedam IK, Trindade SHK [63] • p.79
- Profile of patients registered at HRAC-USP residents in the northern coast of São Paulo State and impact on the treatment due to Covid-19 pandemic. SAMERSLA MOP, Santos CF [44] • p.59
- Rare nonsyndromic craniofacial clefts in 90 brazilian individuals: clinical and etiological aspects. VIRMOND L, Kokitsu-Nakata NM, Serigatto HR, Moura PP, Vendramini-Pittoli S, Tonello C, Zechi-Ceide RM [45] • p.60
- Relationship between surgical skeletal movement and upper airway changes in patients with cleft lip and palate. CARVALHO LRA, Silveira ITT, Duarte BG, Gomes JPF, Yaedú RYF [46] • p.61
- Rhythmic features of speech of cleft palate subjects: acoustic analysis as tool for speech therapy practice. TONOCCHI R, Oliveira GM, Nishida G, Dutka JCR, Pegoraro-Krook MI, Tonocchi R [64] • p.80
- Self-perception of body image in children with orofacial cleft. MILLENA DE OLIVEIRA T, Silva VKC, Menegatti CL, Ivatiuk AL [47] • p.62
- Sleep and breathing in individuals with Treacher Collins Syndrome: Comparison of two polysomnographic methods for the diagnosis of obstructive sleep apnea. FIDÉLIS DA SILVA LV, Medeiros LH, Bueno PM, Trindade SHK, Trindade-Suedam IK [65] • p.81



Sleep-disordered breathing in individuals with Treacher Collins Syndrome: clinical and polysomnographic analysis.

FIDÉLIS DA SILVA LV, Medeiros LH, Bueno PM, Trindade SHK, Trindade-Suedam IK [48] • p.63

Step-by-step oral rehabilitation through lower implant-supported prosthesis for overdenture in a patient with cleft lip and palate.

COSTA LPG, Lopes JFS, Tavano RD, Pinto JHN, Amado FM, Azevedo RMG, Lopes MMW, Soares S, Mazzo A [93] • p.110

Stereophotogrammetry facial analysis of patients with cleft lip or/and palate.

NOGUEIRA VO, Neves MC, Soares S [66] • p.82

Study of septal deviation patterns, nasal lateral wall malformations and inferior nasal turbinates dimensions in patients with complete unilateral cleft lip and palate.

KAYO GML, Benatti CZ, Nascimento ML, Loureiro NB, Trindade-Suedam IK, Trindade SHK [67] • p.83

Surgical correction of lower lip eversion in patients with cleft lip: research project.

MARIOTTO LGS, Carvalho LRA, Gringo CPO, Gomes JPF, Yaedú RYF [68] • p.84

The challenges of multidisciplinary rehabilitation of a patient with unilateral cleft lip and palate: a case report.

MARINHO BARCELLOS B, Toledo Teixeira da Silveira I, Sanches Mariotto LG, Yassutaka Faria Yaedú R [94] • p.111

The ectopic nasal bone: a Hallmark of the Oculoauriculofrontonasal Syndrome.

SERIGATTO HR, Kokitsu-Nakata NM, Moura PP, Vendramini-Pittoli S, Tonello C, Zechi-Ceide RM [49] • p.64

The effect of the type of orthognathic surgery on the nasality of individuals with cleft lip and palate.

MAIA SES, Seixas DR, Fukushiro AP, Yamashita RP [50] • p.65

The effect of the type of orthognathic surgery on the velopharyngeal function of individuals with cleft lip and palate.

MAIA SES, Seixas DR, Fukushiro AP, Yamashita RP [51] • p.66

The role of nasoendoscopy in the fabrication of pharyngeal bulb prosthesis in patients with hypodynamic velopharynx.

ANDRADE LKFA, Pegoraro-Krook MI [52] • p.67

Tomographic study of dental anomalies of endodontic interest in an individual with cleft lip and palate.

NOGUEIRA ACPA, Pinto LC [69] • p.85

Trans operative predictors of hypernasality after orthognathic surgery in individuals with cleft lip and palate: preliminary results.

DUARTE BG, Yaedú RYF, Silveira ITT, Araújo BMAM, Silva ASC, Yamashita RP [53] • p.68

Translation cross cultural adaptation and validation of the bone anchored questionnaire into Brazilian Portuguese.

PELANDA-ZAMPRONIO CD, Oliveira JRM, Maximino LP [70] • p.86

Treatment of vertical excess of premaxilla in bilateral cleft lip and palate patient: Case report.

RABELO IBM, Aguiar ALM, Olsson B, Sebastiani AM, Kluppel LE, Scariot R [95] • p.112

Upper airways dimension increase in cleft lip and palate children submitted to the rapid maxillary expansion protocol with maxillary protraction with facemask.

SANTOS YA, Rodrigues LM, Ayrea LCG, Repeke DB, Repeke CEP [54] p.69



ÍNDICE • POR AUTOR



Adam Fraga G [12] • p.27

Aferri HC [29] • p.44

Aferri HC [39] • p.54

Aferri HC [40] • p.55

Aferri HC [60] • p.76

Aguiar ALM [95] • p.112

Aguiar ALM [97] • p.115

Almeida ALPF [04] • p.19

Almeida ALPF [15] • p.30

Almeida ALPF [22] • p.37

Almeida ALPF [61] • p.77

Almeida CBP [23] • p.38

Almeida DMBM [24] • p.39

Almeida MLG [13] • p.28

Alonso N [36] • p.51

Alonso N [41] • p.56

Alonso N [91] • p.108

Alvarenga KF [24] • p.39

Alves de Souza L [20] • p.35

Amado FM [93] • p.110

Ambrosio ECP [18] • p.33

Ambrosio ECP [42] • p.57

Andrade FB [85] • p.102

Andrade LKFA [29] • p.44

Andrade LKFA [52] • p.67

Antoneli MZ [31] • p.46

Antoneli MZ [41] • p.56

Antonio CT [03] • p.18

Antonio CT [08] • p.23

Antonio CT [96] • p.114

Araújo BMAM [33] • p.48

Araújo BMAM [53] • p.68

Araújo BMAM [57] • p.73

Araújo ES [24] • p.39

Ayrea LCG [54] • p.69

Azevedo RMG [93] • p.110

Bachega MI [22] • p.37

Banhara FL [43] • p.58

Barcellos BM [56] • p.72

Barcellos BM [72] • p.89

Barcellos BM [90] • p.107

Barros SP [07] • p.22

Barros SP [55] • p.71

Bastos Junior JCC [23] • p.38

Batista NT [03] • p.18

Batista NT [08] • p.23

Batista NT [19] • p.34

Batista NT [96] • p.114

Benatti CZ [67] • p.83

Bento-Gonçalves CGA [83] • p.100

Bernardes DG [10] • p.25

Bernardes DG [77] • p.94

Boca AC [89] • p.106

Bom GC [03] • p.18



Bom GC [08] • p.23

Bom GC [19] • p.34

Bom GC [38] • p.53

Bom GC [96] • p.114

Braga BMR [10] • p.25

Braga BMR [22] • p.37

Braga BMR [77] • p.94

Braga BMR [84] • p.101

Brandão GR [83] • p.100

Bueno PM [06] • p.21

Bueno PM [07] • p.22

Bueno PM [30] • p.45

Bueno PM [48] • p.63

Bueno PM [55] • p.71

Bueno PM [65] • p.81

Busqueti JVS [22] • p.37

Carrara CFC [18] • p.33

Carrara CFC [42] • p.57

Carvalho LRA [46] • p.61

Carvalho LRA [68] • p.84

Carvalho LRA [74] • p.91

Carvalho PVS [37] • p.52

Carvalho PVS [38] • p.53

Carvalho RM [10] • p.25

Carvalho RM [23] • p.38

Carvalho RM [36] • p.51

Carvalho RM [84] • p.101

Castro-Meran AP [74] • p.91

Cerón-Zapata AM [42] • p.57

Cezar T [21] • p.36

Cezar T [28] • p.43

Costa LPG [93] • p.110

Costa SR [27] • p.42

Dalben GS [76] • p.93

Dalben GS [89] • p.106

DAquino A [05] • p.20

DAquino A [34] • p.49

das Neves LT [35] • p.50

Das Neves LT [89] • p.106

de Andrade LKF [39] • p.54

De Oliveira LNM [89] • p.106

De Souza OMV [39] • p.54

de Souza OMV [62] • p.78

Di Donato N [73] • p.90

Dias RS [75] • p.92

Dos Inocentes RJM [02] • p.17

Draghi LA [39] • p.54

Duarte BG [46] • p.61

Duarte BG [53] • p.68

Dutka JCR [11] • p.26

Dutka JCR [14] • p.29

Dutka JCR [17] • p.32

Dutka JCR [21] • p.36

Dutka JCR [28] • p.43

Dutka JCR [29] • p.44

Dutka JCR [31] • p.46

Dutka JCR [39] • p.54

Dutka JCR [40] • p.55

Dutka JCR [60] • p.76

Dutka JCR [62] • p.78



Dutka JCR [64] • p.80

Faco RAS [36] • p.51

Farha A [11] • p.26

Farha ALH [09] • p.24

Farina Puntel L [20] • p.35

Farina Puntel L [24] • p.39

Farinha FT [08] • p.23

Farinha FT [96] • p.114

Ferreira dos Santos C [25] • p.40

Ferreira FR [17] • p.32

Ferreira GR [82] • p.99

Ferreira Junior O [74] • p.91

Ferreira O [76] • p.93

Fidelis Da Silva LV [06] • p.21

Fidelis Da Silva LV [30] • p.45

Fidélis da Silva LV [48] • p.63

Fidélis da Silva LV [65] • p.81

Freitag IH [97] • p.115

Freitas-Alvarenga K [20] • p.35

Fukushiro AP [33] • p.48

Fukushiro AP [39] • p.54

Fukushiro AP [50] • p.65

Fukushiro AP [51] • p.66

Fukushiro AP [55] • p.71

Fukushiro AP [57] • p.73

Fukushiro AP [79] • p.96

Galvanin AL [71] • p.88

Garcia-Usó M [25] • p.40

Gazola M [37] • p.52

Gomes JPF [46] • p.61

Gomes JPF [68] • p.84

Gomes JPF [80] • p.97

Gomes JPF [90] • p.107

Gonçalves MG [15] • p.30

Gringo CPO [16] • p.31

Gringo CPO [68] • p.84

Gringo CPO [72] • p.89

Guanoluiza LA [92] • p.109

Guion-Almeida ML [73] • p.90

Ivatiuk AL [47] • p.62

Jorge PK [18] • p.33

Jorge PK [42] • p.57

Junqueira ATF [23] • p.38

Kayo GML [67] • p.83

Kluppel LE [95] • p.112

Kokitsu-Nakata NM [13] • p.28

Kokitsu-Nakata NM [45] • p.60

Kokitsu-Nakata NM [49] • p.64

Kokitsu-Nakata NM [63] • p.79

Kokitsu-Nakata NM [71] • p.88

Kokitsu-Nakata NM [73] • p.90

Kokitsu-Nakata NM [77] • p.94

Kokitsu-Nakata NM [81] • p.98

Kokitsu-Nakata NM [91] • p.108

Leal CR [10] • p.25

Leal CR [84] • p.101

Lopes JFS [93] • p.110

Lopes MMV [29] • p.44

Lopes MMW [39] • p.54

Lopes MMW [40] • p.55



ÍNDICE • POR AUTOR (continuação)

Lopes MMW [60] • p.76	Mazzo A [26] • p.41
Lopes MMW [93] • p.110	Mazzo A [93] • p.110
López-Palacio AM [42] • p.57	Medeiros LH [06] • p.21
Loureiro NB [05] • p.20	Medeiros LH [07] • p.22
Loureiro NB [34] • p.49	Medeiros LH [30] • p.45
Loureiro NB [67] • p.83	Medeiros LH [48] • p.63
Loureiro NB [58] • p.74	Medeiros LH [55] • p.71
Lourençone LFM [12] • p.27	Medeiros LH [65] • p.81
Machado MAAM [18] • p.33	Medeiros-Santana MNL [88] • p.105
Machado MAAM [27] • p.42	Medrano-Gutierrez A [76] • p.93
Machado MAAM [42] • p.57	Mello LLN [88] • p.105
Maia SES [33] • p.48	Mello MAB [72] • p.89
Maia SES [50] • p.65	Mello MAB [74] • p.91
Maia SES [51] • p.66	Mello MAB [75] • p.92
Manso MMFG [03] • p.18	Mello MAB [90] • p.107
Manso MMFG [08] • p.23	Mello-Peixoto YCT [42] • p.57
Manso MMFG [38] • p.53	Melo da Silva C [59] • p.75
Manso MMFG [96] • p.114	Mendes P [76] • p.93
Marinho Barcellos B [94] • p.111	Menegatti CL [47] • p.62
Marino VCC [11] • p.26	Meneses Júnior NS [85] • p.102
Marino VCC [39] • p.54	Messias TS [32] • p.47
Mariotto LGS [68] • p.84	Miguel HC [79] • p.96
Mariotto LGS [74] • p.91	Millena de Oliveira T [47] • p.62
Mariotto LGS [75] • p.92	Miotto EC [13] • p.28
Mariotto LGS [80] • p.97	Miranda S [76] • p.93
Marzano-Rodrigues MN [02] • p.17	Mondini CCSD [19] • p.34
Marzano-Rodrigues MN [05] • p.20	Motta ND [17] • p.32
Matiole CR [37] • p.52	Moura LB [41] • p.56
Matiole CR [38] • p.53	Moura PP [45] • p.60
Maximino LP [70] • p.86	Moura PP [49] • p.64



ÍNDICE • POR AUTOR *(continuação)*

Nascimento ML [67] • p.83	Pegoraro-Krook MI [29] • p.44
Nascimento MLB [58] • p.74	Pegoraro-Krook MI [39] • p.54
Negrato CA [20] • p.35	Pegoraro-Krook MI [40] • p.55
Neves LT [09] • p.24	Pegoraro-Krook MI [52] • p.67
Neves MC [66] • p.82	Pegoraro-Krook MI [59] • p.75
Neves MC [98] • p.115	Pegoraro-Krook MI [60] • p.76
Nishida G [64] • p.80	Pegoraro-Krook MI [62] • p.78
Noel M [01] • p.16	Pegoraro-Krook MI [64] • p.80
Nogueira ACPA [69] • p.85	Peixoto AP [77] • p.94
Nogueira ACPA [85] • p.102	Peixoto YCTM [18] • p.33
Nogueira VO [66] • p.82	Pelanda-Zampronio CD [70] • p.86
Oliveira BMB [97] • p.115	Penhavel RA [78] • p.95
Oliveira DT [82] • p.99	Petroni VBP [60] • p.76
Oliveira DT [86] • p.103	Pierim Vieira F [83] • p.100
Oliveira DT [87] • p.104	Pinto JHN [93] • p.110
Oliveira GM [64] • p.80	Pinto JHN [98] • p.115
Oliveira JL [21] • p.36	Pinto LC [69] • p.85
Oliveira JRM [70] • p.86	Pinto LC [85] • p.102
Oliveira TM [18] • p.33	Pinto MDB [29] • p.44
Oliveira TM [42] • p.57	Pinto MDB [39] • p.54
Olmedo S [92] • p.109	Pinto MDB [40] • p.55
Olsson B [95] • p.112	Porto Peixoto A [89] • p.106
Ozawa TO [10] • p.25	Prearo GA [11] • p.26
Ozawa TO [36] • p.51	Preto KA [82] • p.99
Ozawa TO [77] • p.94	Preto KA [86] • p.103
Ozawa TO [84] • p.101	Rabelo IBM [95] • p.112
Paccola SAO [19] • p.34	Rabelo IBM [97] • p.115
Panigali AO [98] • p.115	Rafacho MB [13] • p.28
Pegoraro-Krook MI [11] • p.26	Rala ETL [14] • p.29
Pegoraro-Krook MI [17] • p.32	Regini VBG [28] • p.43



Reis LAC [56] • p.72	Sebastiani AM [95] • p.112
Repeke CEP [54] • p.69	Segarra VCD [91] • p.108
Repeke DB [54] • p.69	Seixas DR [33] • p.48
Resende Leal C [36] • p.51	Seixas DR [50] • p.65
Ribeiro AA [01] • p.16	Seixas DR [51] • p.66
Ribeiro AA [02] • p.17	Sena LMF [43] • p.58
Rocha LA [36] • p.51	Serigatto HR [45] • p.60
Rodrigues LM [54] • p.69	Serigatto HR [49] • p.64
Rodrigues MN [34] • p.49	Serigatto HR [73] • p.90
Rodrigues MNM [58] • p.74	Serigatto HR [81] • p.98
Rondina IS [62] • p.78	Serrão VT [13] • p.28
Rufino SS [78] • p.95	Shaw N [91] • p.108
Ruiz DMCF [41] • p.56	Siecola MW [40] • p.55
Ruiz Simão L [25] • p.40	Siemann ME [13] • p.28
Samersla MOP [44] • p.59	Silva Araújo E [20] • p.35
Sanches Mariotto LG [94] • p.111	Silva ASC [33] • p.48
Santiago JFJ [98] • p.115	Silva ASC [53] • p.68
Santiago Junior JF [25] • p.40	Silva ASC [57] • p.73
Santos ACA [41] • p.56	Silva CM [35] • p.50
Santos CCV [61] • p.77	Silva ES [17] • p.32
Santos CF [44] • p.59	Silva KCP [32] • p.47
Santos GL [82] • p.99	Silva LVF [07] • p.22
Santos GL [86] • p.103	Silva LVF [55] • p.71
Santos GL [87] • p.104	Silva MLC [57] • p.73
Santos GX [26] • p.41	Silva VKC [47] • p.62
Santos JV [83] • p.100	Silveira ABV [18] • p.33
Santos KG [80] • p.97	Silveira ABV [42] • p.57
Santos YA [54] • p.69	Silveira ITT [46] • p.61
Scariot R [95] • p.112	Silveira ITT [53] • p.68
Scomparin L [01] • p.16	Silveira ITT [56] • p.72



ÍNDICE • POR AUTOR (continuação)

<i>Silveira ITT</i> [75] • p.92	<i>Trindade SHK</i> [05] • p.20
<i>Soares S</i> [32] • p.47	<i>Trindade SHK</i> [34] • p.49
<i>Soares S</i> [66] • p.82	<i>Trindade SHK</i> [43] • p.58
<i>Soares S</i> [93] • p.110	<i>Trindade SHK</i> [48] • p.63
<i>Sousa OMV</i> [29] • p.44	<i>Trindade SHK</i> [58] • p.74
<i>Souza AG</i> [31] • p.46	<i>Trindade SHK</i> [63] • p.79
<i>Souza MAS</i> [04] • p.19	<i>Trindade SHK</i> [65] • p.81
<i>Souza OMS</i> [40] • p.55	<i>Trindade SHK</i> [67] • p.83
<i>Spilari S</i> [63] • p.79	<i>Trindade-Suedam IK</i> [01] • p.16
<i>Tabaquim MLM</i> [17] • p.32	<i>Trindade-Suedam IK</i> [02] • p.17
<i>Tavano RD</i> [93] • p.110	<i>Trindade-Suedam IK</i> [05] • p.20
<i>Toledo Teixeira da Silveira I</i> [94] • p.111	<i>Trindade-Suedam IK</i> [06] • p.21
<i>Tomasevicius Filho E</i> [21] • p.36	<i>Trindade-Suedam IK</i> [07] • p.22
<i>Tomasevicius Filho E</i> [28] • p.43	<i>Trindade-Suedam IK</i> [25] • p.40
<i>Tonello C</i> [36] • p.51	<i>Trindade-Suedam IK</i> [30] • p.45
<i>Tonello C</i> [45] • p.60	<i>Trindade-Suedam IK</i> [34] • p.49
<i>Tonello C</i> [49] • p.64	<i>Trindade-Suedam IK</i> [43] • p.58
<i>Tonello C</i> [91] • p.108	<i>Trindade-Suedam IK</i> [48] • p.63
<i>Tonocchi R</i> [64] • p.80	<i>Trindade-Suedam IK</i> [55] • p.71
<i>Tonocchi R</i> [64] • p.80	<i>Trindade-Suedam IK</i> [63] • p.79
<i>Trettene AS</i> [03] • p.18	<i>Trindade-Suedam IK</i> [65] • p.81
<i>Trettene AS</i> [08] • p.23	<i>Trindade-Suedam IK</i> [67] • p.83
<i>Trettene AS</i> [19] • p.34	<i>Trindade-Suedam IK</i> [79] • p.96
<i>Trettene AS</i> [37] • p.52	<i>Trindade-Suedam IK</i> [58] • p.74
<i>Trettene AS</i> [38] • p.53	<i>Vaca M</i> [92] • p.109
<i>Trettene AS</i> [96] • p.114	<i>Vendramini-Pittoli S</i> [45] • p.60
<i>Trindade IEK</i> [43] • p.58	<i>Vendramini-Pittoli S</i> [49] • p.64
<i>Trindade PAK</i> [06] • p.21	<i>Vendramini-Pittoli S</i> [71] • p.88
<i>Trindade PAK</i> [30] • p.45	<i>Villela Berbert Daniel A</i> [87] • p.104
<i>Trindade PAK</i> [86] • p.103	<i>Virmond L</i> [45] • p.60



ÍNDICE • POR AUTOR (continuação)

Virmond L **[81]** • p.98
Wanderley CMS **[79]** • p.96
Whitaker ME **[29]** • p.44
Whitaker ME **[39]** • p.54
Yaedú RYF **[16]** • p.31
Yaedú RYF **[46]** • p.61
Yaedú RYF **[53]** • p.68
Yaedú RYF **[56]** • p.72
Yaedú RYF **[68]** • p.84
Yaedú RYF **[72]** • p.89
Yaedú RYF **[74]** • p.91
Yaedú RYF **[75]** • p.92
Yaedú RYF **[76]** • p.93
Yaedú RYF **[80]** • p.97
Yaedú RYF **[87]** • p.104
Yaedú RYF **[90]** • p.107
Yamashita RP **[23]** • p.38
Yamashita RP **[33]** • p.48
Yamashita RP **[50]** • p.65
Yamashita RP **[51]** • p.66
Yamashita RP **[53]** • p.68
Yassutaka Faria Yaedú R **[94]** • p.111
Yatabe-Ioshida MS **[02]** • p.17
Zabeu JS **[12]** • p.27
Zechi-Ceide RM **[13]** • p.28
Zechi-Ceide RM **[45]** • p.60
Zechi-Ceide RM **[49]** • p.64
Zechi-Ceide RM **[63]** • p.79
Zechi-Ceide RM **[71]** • p. 88

Zechi-Ceide RM **[73]** • p.90
Zechi-Ceide RM **[81]** • p.98
Zechi-Ceide RM **[91]** • p.108



TRABALHOS PREMIADOS



CATEGORIA PESQUISA

1º LUGAR ALEITACLEFT: CONSTRUCTION OF A WEBSITE REGARDING BREASTFEEDING IN INFANTS WITH OROFACIAL CLEFT

NAYARA TOMAZI BATISTA, Camila Trettene Antonio, Gesiane Cristina Bom, Maila Meryellen Ferreira Garcia Manso, Armando dos Santos Trettene

MENÇÃO HONROSA INCIDENCE OF COVID -19 IN ADULT INDIVIDUALS WITH CLEFT LIP AND PALATE ENROLLED AT HRAC-USP

LUIZA RUIZ SIMÃO, Carlos Ferreira dos Santos, Joel Ferreira Santiago Jr, Michele Garcia-Usó, Ivy Kiemle Trindade Suedam

CATEGORIA REVISÃO SISTEMÁTICA

1º LUGAR ORAL REHABILITATION IN PATIENTS WITH PALATE PROSTHESIS: SYSTEMATIC REVIEW

MARIA CAROLINA NEVES, Olavo Alcade Panigali, João Henrique Nogueira Pinto, Joel Ferreira Santiago Junior

CATEGORIA PROJETO DE PESQUISA

1º LUGAR PREVALENCE OF SLEEP BREATHING DISORDERS IN INDIVIDUALS WITH CHROMOSOME 22q11.2 DELETION SYNDROME AND ITS RELATIONSHIP WITH CARDIORESPIRATORY CAPACITY

SARAH SPILARI, Roseli Maria Zechi Ceide, Nancy Mizue Kokitsu-Nakata, Ivy Kiemle Trindade-Suedam, Sergio Henrique Kiemle Trindade

MENÇÃO HONROSA SLEEP AND BREATHING IN INDIVIDUALS WITH TREACHER COLLINS SYNDROME: COMPARISON OF TWO POLYSOMNOGRAPHIC METHODS FOR THE DIAGNOSIS OF OBSTRUCTIVE SLEEP APNEA

LEIDE VILMA FIDÉLIS DA SILVA, Laís Hollara Medeiros, Patricia Martins Bueno, Sergio Henrique Kiemle Trindade, Ivy Kiemle Trindade Suedam



TRABALHOS PREMIADOS *(continuação)*

CATEGORIA CASO CLÍNICO

1º LUGAR PATHOGENIC VARIATION IN SMCHD1 CAUSING ARHINIA: A MILD FORM OF BOSMA ARHINIA MICROPHthalmia SYNDROME?

VINICIUS CONTRUCCI DANTAS SEGARRA, Cristiano Tonello, Nivaldo Alonso, Natalie Shaw, Nancy Mizue Kokitsu-Nakata, Roseli Maria Zechi-Ceide

MENÇÃO HONROSA BARAITSER-WINTER CEREBROFRONTOFACIAL SYNDROME: AN ADDITIONAL BRAZILIAN CASE REPORT

HENRIQUE REGONASCHI SERIGATTO, Nancy Mizue Kokitsu Nakata, Nataliya Di Donato, Maria Leine Guion Almeida, Roseli Maria Zechi Ceide