SPEECH NASALITY DURING HIGH AND LOW PRESSURE SOUNDS AFTER PRIMARY PALATOPLASTY WITH FURLOW OR LANGENBECK PROCEDURES

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OBJECTIVE: Speech nasality is a measure of outcome of surgical management of cleft lip and palate. The objective of this study was to compare speech nasality outcome between the Furlow (F) and von Langenbeck (L) procedures used during primary palatoplasty. METHODS: A group of 431 patients, 257 males and 174 females, were randomly assigned to two different surgical procedures for primary repair of cleft palate: 193 received the F technique and 278 received the L technique. Speech outcome was documented live by speech pathologists and also by judges who rated speech samples recorded during production of phrases with high and low pressure oral sounds. Nasalance scores were also obtained. RESULTS: When considering the live assessment: cul-de-sac testing revealed that 18% of patients in the F group were hypernasal compared to 26% in the V group; for the 2-point scale, 18% was hypernasal in F group and 27% in V group. For the high pressure samples: nasalance scores revealed that 45% was considered hypernasal in F group compared to 58% in L group while listeners ratings indicated 34% in F group compared to 46% in L group. For the low pressure samples: nasalance scores revealed that 45% was considered hypernasal in F group compared to 55% in L group while listeners ratings indicated 28% in F group compared to 40% in L group. CONCLUSION: Speech outcome for both the high pressure and low pressure samples were better for the group that received the F procedure.