

LETTERS TO THE EDITOR

Predominance and Improvement of Velopharyngeal Function in Patients without Complete Closure in Blowing

TO THE EDITOR:

We read with great interest the article entitled "Pre-speech in children with cleft lip and palate or cleft palate only: phonetic analysis related to morphologic and functional factors" (Cleft Palate-Craniofacial Journal 1994;31:271-279), by Dr. Lohmander-Agerskov et al., because the velopharyngeal inadequacy tends to make many misarticulations and substitutions into consonants that require less intraoral air pressure is well known. They found significant correlations between a high frequency of anterior sounds and isolated cleft palate. This is obviously precise and, therefore, probably superior to predicting misarticulations.

The predominance of consonants is seen somewhat in the velopharyngeal functions in repaired cleft palates (Yamaoka, 1973). We examined velopharyngeal closure in 68 operated cleft palates to represent a guideline for the identification of different velopharyngeal functions although unrepaired cleft was not investigated. Eighteen out of 25 patients who achieved velopharyngeal complete closure on blowing achieved velopharyngeal complete closure on phonations of consonants. Out of 43 patients who did not achieve complete velopharyngeal closure in blowing, only 3 achieved velopharyngeal complete closure on phonations of consonants, especially with /k/ of posterior sound (Matsuya et al., 1979). This suggests that there is a predominance of velar consonants in patients who did not achieve complete velopharyngeal closure in blowing. Phonetic productions may be secondarily influenced by velopharyngeal closure development. The incidence of improvement in velopharyngeal function in patients who achieved velopharyngeal complete closure in blowing 21 out of 23 (91.3%) is higher than patients who did not achieve it in blowing 14 out of 36 (38.9%) (Yamaoka et al., 1983). Moreover, we have needed exploration of relationships between early structural deficits and the child's developing phonetic/phonologic system (Chapman, 1991), and misarticulation may be shown by retardation in the development of soft tissues in the mouth and pharynx. Children may establish a link between babbling and their receptive functions through the sensory monitoring of their own oral air pressure and vibration (Furusawa et al., 1994). The addition of this information about the highly sensitive infra-orbital nerve for /p/ production may assist in clarifying the improvement of velopharyngeal function. We feel the severity of the cleft or structural defects is proportional to misarticulation in later speech and that development of velopharyngeal functions and receptive functions modify the effects of the severity of the cleft on misarticulations. Those factors may provide

us with valuable information for predicting facilitation of articulations. It is hoped that long-term follow-up will be achieved for analyzing the time and duration of the extent to which the cleft influences misarticulation.

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