

Cleft of The Hard Palate With Soft Palate Integrity

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This report concerns a rare case of an overt cleft involving the posterior portion of the hard palate and the anterior portion of the soft palate with a submucous cleft of that part of the soft palate posterior to the overt cleft.

KEY WORDS: Cleft palate, hard palate, soft palate

Evidence indicates that the secondary palate ordinarily forms by midline fusion of the lateral palatal shelves beginning anteriorly and proceeding posteriorly. The theory that clefts of the secondary palate reflect an arrest of this process explains almost all clefts seen in clinical practice. In incomplete clefts of the secondary palate, the areas of integrity or relative integrity usually are located anterior to the overt cleft.

Incomplete clefts of the secondary palate with relative integrity posterior to the overt defect are so extraordinary that knowledgeable professionals have doubted their existence. Such an unusual case has been seen at the University of Pittsburgh, and through the writings of Fara (1971), Lynch (1966), and Veau (1931), we have been able to discover at least six and possibly ten other similar cases, one from the United States and the rest from continental Europe. The anomaly is inconsistently classified in indices, and case retrieval is, therefore, difficult.

The Pittsburgh patient, when operated upon at 17 months of age, showed an overt

cleft of the posterior seven millimeters of the hard palate and the anterior four millimeters of the soft palate (See Figure 1, page 205). The hard palate anterior to this overt cleft was normal. The soft palate posterior to the overt cleft was normal to inspection except for a bifid uvula, but dissection showed that the levator muscles did not meet in the midline to form a sling. Instead the levators followed the typical cleft pattern and attached to the posterior margin of the hard palate (See Figure 2, page 206).

Fara (1971) reported five similar cases from Prague, all showing an anterior overt cleft and a posterior submucous cleft. The case from Galveston described by Lynch (1966) seems to have been unique in that the soft palate posterior to the cleft was normal with no stigmata of either overt or occult submucous clefting. The four cases from Paris reported by Veau (1931) are believed to be related but are imprecisely described.

The embryogenesis of this curious anomaly is not explainable on the basis of current knowledge, but it does raise, once again, the question of possible postfusion rupture.

References

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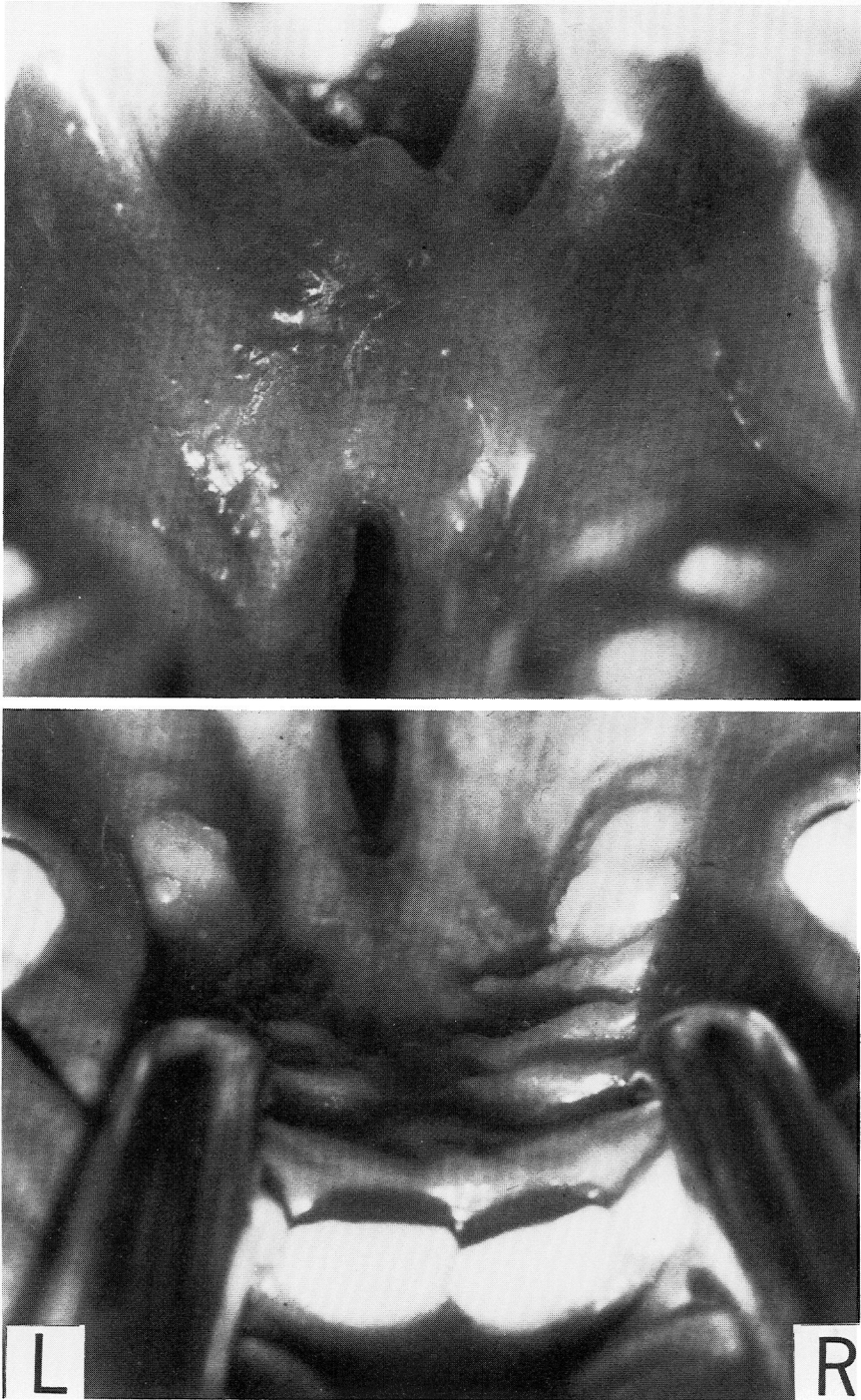
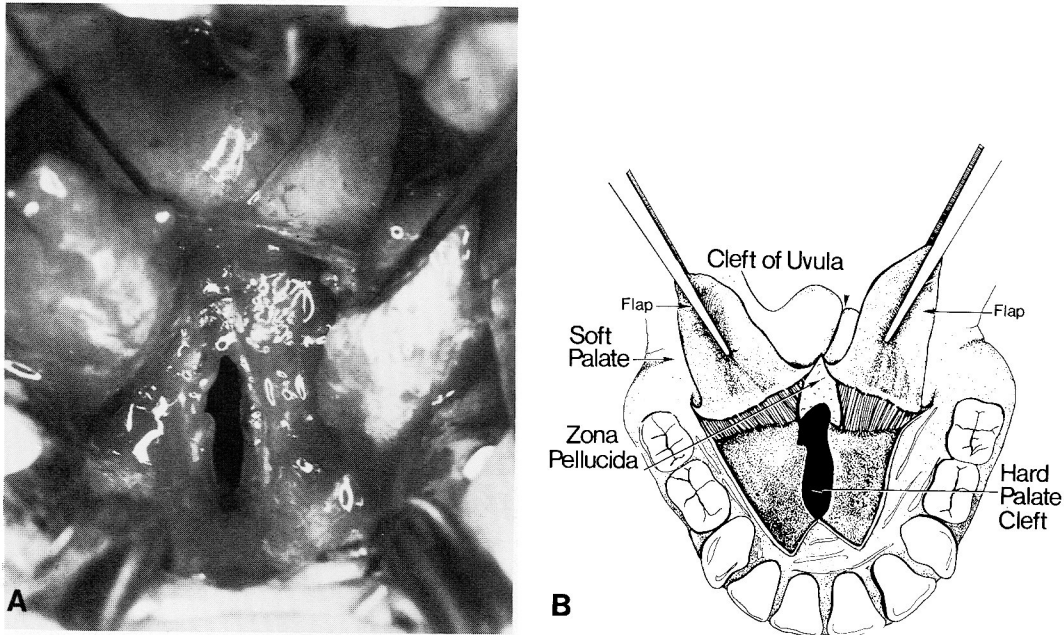


FIGURE 1. A composite photograph of the unrepaired cleft. The bifidity of the uvula is not apparent at first glance because the left portion overlies and obscures the right. The resulting serpentine configuration of the midline raphe can be seen in this photograph.



FIGURES 2a and b. A photograph of the surgical dissection with an explanatory diagram. A zona pellucida is present in the midline. Muscle fibers lie in an anterior-posterior direction, are attached to the posterior margin of the hard palate, and do not reach the midline. The bifidity of the as yet undissected uvula is more clearly defined in this figure than in Figure 1.