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50 Years Ago in The Journal of Pediatrics

Dissecting Down Microform Cleft Lip

Pomerance HH. Congenital prolabial-maxillary scar: A possible minor expression of cleft lip. J Pediatr 1971;78:868-70.

Three cases of infants (2 female) born with a linear scar located at the right prolabial-maxillary junction and flattening of the right nares were reported by Pomerance in 1971. In 1 of the 3 cases, notching of the upper lip was observed. A family history of a first-degree relative with clefting was noted in 2 cases with an older sibling in 1 case having a unilateral cleft lip and the mother of a different affected infant having a repaired cleft lip and palate. The presence of an affected first-degree family member in 2 of the 3 cases and notching of the upper lip in the third case provided strong evidence that the prolabial maxillary scar observed in the 3 cases represented a form fruste of a cleft lip.

Facial development begins during the fourth week of embryologic development and is mediated by migrating neural crest cells which form the facial prominences. Isolated cleft lip falls within the spectrum of nonsyndromic cleft lip with or without cleft palate. A cleft lip usually represents a failure of fusion between the maxillary and medial nasal processes and its occurrence may be mediated by a number of genes such as *IRF6*, *VAX1*, and *PAX7*.

Based on a retrospective chart review of 393 cases with unilateral cleft lip, Yuzeriha and Mullikan stratified the "lesser forms of unilateral cleft lip" into 3 groupings on the basis of extent of disruption at the vermilion-cutaneous junction: minor-form clefts, which are defects extending 3 mm or above the normal Cupid's bow peak; microform clefts, defined as a vermilioncutaneous notch less than 3 mm above the normal peak; and minimicroform clefts, which represent disrupted vermilion-cutaneous junction without elevation of the bow peak. All 3 forms were associated with different surgical correction procedures and all forms had some degree of nasal deformity, with the minimicroform cleft having a variable nasal deformity referred to as a depressed nasal sill.

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