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THE TESSIER NUMBER 30 CLEFT

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SUMMARY

A case of the Tessier number 30 cleft is being presented because of its rarity alongwith the review of literature.

Tessier (1973) described fifteen locations of rare craniofacial clefts (number 0 to 14) using the orbit as the point of reference. The number 0 cleft falls in the midline of the cranium and face. Median clefts of the lower lip and mandible coincide with the caudal extension of the number 0 cleft. Although these clefts fall on the number 0 cleft median, Tessier has tentatively labelled them No. 30 clefts. This group would include the mandibular process clefts (AACPR classification), branchiogenic medial axial B2 clefts (Karfik, 1966) and the midline branchiogenic syndrome (Cosman and Crikelair, 1969).

Case Report

A two and a half months old male child presented with congenital facial deformities. The baby was the product of a full term normal pregnancy. There was no history of the mother having taken drugs or having been exposed to radiation during the pregnancy. No history of consanguinity or of such a congenital anomaly in other siblings could be elicited.

On general examination cardiovascular system, respiratory system and nervous system revealed no abnormality. E.N.T. examination was within normal limits. Examination of the face revealed complete midline cleft of the lower lip and cleft of the bony mandibular symphysis (Fig. 1). The anterior portion of the tongue was bifid and bound to the divided mandible by dense fibrous tissue. There was no deformity of other facial structures. Sternum and the clavicles were normal. There was no cleft in palate.

Discussion

The cleft of the lower lip can be limited to the soft tissue. In its most minor form, a notch in the lower lip is present. More frequently, however, the cleft extends into the bony mandibular symphysis. As the severity of the malformation increases, the neck structures, hyoid bone and even the sternum are progressively involved.

Midline mandibular clefts and anomalies of the anterior two-thirds of the tongue are due to interference with the normal union of the paired first branchial arches (Mandibular arch) as they converge ventrally. Monroe (1966) concluded after a review of the literature that midline mandibular clefts were best explained by a failure of mesodermal penetration.

The mandibular cleft can be associated with deformities of other facial structures. Couronne (1819) first described the median cleft of the lower jaw. Total absence of the tongue (Rosenthal 1932; Herren, 1964), clefts of the soft palate (Weyer, 1963; Monroe, 1966), cleft of the upper lip and palate (Ashley and Richardson, 1943), bilateral cleft of the maxillary alveolus (Gardner and associates), median cleft of the upper lip (Schalbe, 1913), hemicraniofacial microsomia (Braithwaite and Watson, 1949) and dermoid of the nose (Wolfler, 1890) have also been associated with mandibular clefts.

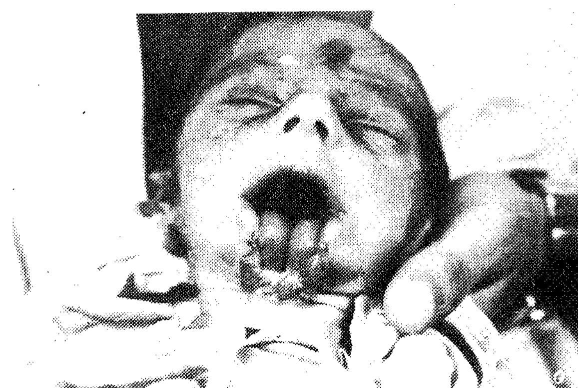

Fig. 1. Showing midline cleft of the lower lip, tongue and the mandible.

REFERENCES

1. ASHLEY, L.M. AND RICHARDSON, G.E. : Multiple congenital anomalies in a sitllborn infant. Anat. Rec. 1943; 86 : 457.
2. BRAITHWAITE, F. AND WATSON, J. : Three unusual clefts of the lip. Br. J. Plast. Surg. 1949; 2 : 38.
3. COSMAN, B. AND CRIKELAIR, G.F. : Midline branchiogenic syndromes. Plast. Reconstr. Surg. 1969; 44 : 41.
4. COURONNE, A. : Clin. Soc. Med. Prot. Montpellier, 1819 : 107.
5. GARDNER, D.G. KAPUN, R.N. AND JORDAN, R.E. : A cleft of the mandible in the lateral incisor cuspid region. Oral Surg 1973; 35 : 649.
6. HERREN, P. : Case depicted in Gorlin, R.J. and Pindborg, J.J. : Syndromes of the Head and Neck. New York, McGraw-Hill 1964; 38.
7. KARFIK, V. : Proposed classification of rare congenital cleft malformations in the face. Acta Chir. Plast. (Praha) 1966; 8 : 163.
8. MONROE, C.W. : Midline cleft of the lower lip, mandible, tongue with flexion contracture of the neck: Case report and review of the literature. Plast. Reconstr. Surg. 1966; 38 : 312.
9. ROSENTHAL, R. : Aglossia congenital : Report of a case of the condition combined with other congenital malformations. J. Dis. Child. 1932; 44 : 383.
10. SCHALBE, E. : Die Morphologie der Missbildungen des Menschen und der Tiere, Part 3. 1913; 119.
11. WEYER, H. : Hexadactyly, lower jaw cleft, oligodontia (a new syndrome). Anna. Paediatr. 1963; 181 : 45.
12. WOLFLER, A. : Midline cleft of lower lip, tongue and mandible. Arch. Klin, Chir. 1890; 40 : 795.

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