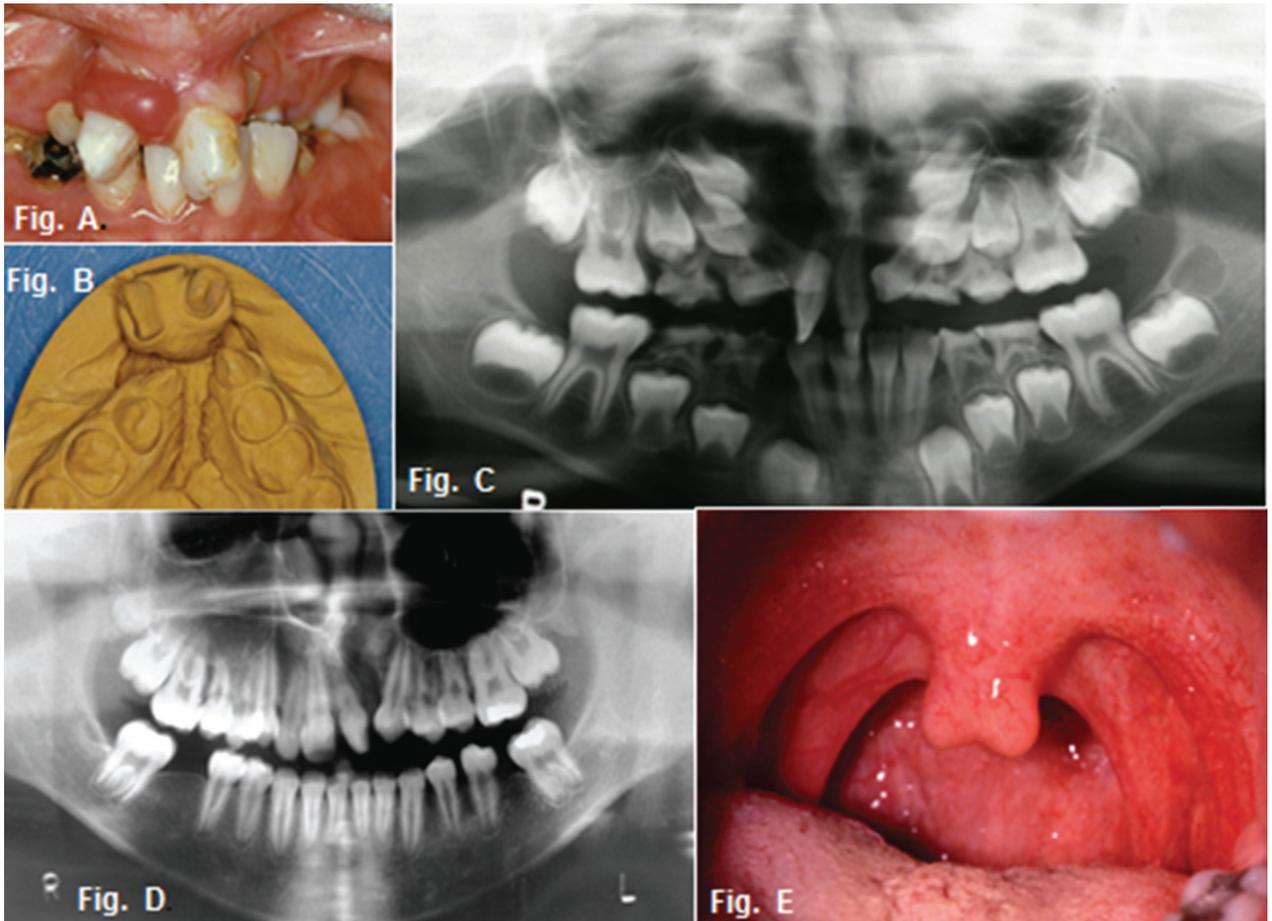


Maxillo-facial radiology case 133

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Below are clinical and radiographic images of a condition that may occur in about 1 in 1,000 live births. It is reportedly most common in the Japanese and least common in Negroes. What is your diagnosis?



INTERPRETATION

The above images are examples of cleft palate and cleft lip. After clubfoot, cleft lip and cleft palate are the most frequently encountered congenital deformities. Cleft palate is a defect in the continuity of the palate resulting from incomplete development or maturation of embryonal processes. It is often but not invariably accompanied by cleft lip. Cleft palate may be an isolated occurrence or may be part of various specific syndromes. Cleft palate varies greatly in severity and tissue involvement. The hard or soft palate, or a combination of both, can be affected. Frequently, clefts of the hard palate extend anteriorly through the alveolar ridge and lip, deviating to the right and/or left in the premaxilla. Sometimes, although much less often, the premaxillary defect is bilateral (Figs. A, B, C). When the alveolar ridge is affected, teeth in the region may be missing (Fig. D), deformed, or displaced,

or supernumerary teeth can be present. The etiology is not completely understood, but heredity plays a role. Chromosomal abnormalities and exogenous factors are recognized as having etiologic impact, and a positive relationship between advancing age of parents and frequency of cleft has been demonstrated. On occasion only the soft palate or a bifid uvula is involved (Fig. E). In unilateral cases of combined total cleft lip and palate, the vomer is in most cases connected with the palatal plate of the non-affected side. In about half of cases, other developmental abnormalities are present. These include a variety of specific syndromes, congenital heart defects, polydactyly or syndactyly, hydrocephalus, spina bifida, and mental deficiency.

References

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