

Congenital Epulis – A Case Report

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Summary

THE CONGENITAL EPULIS, first reported over 100 years ago, is a rare lesion whose nature and origin still remains an enigma. Only about 80 cases have been reported in the literature and case reports of Asians are even fewer. A Chinese baby girl with congenital epulis of the maxillary incisor region is reported. The authors give reasons to support their view that the congenital epulis is an odontogenic anomaly. Hormones may also play a contributory role in causing the lesion.

Congenital Epulis — A Case Report

The congenital epulis, first reported over 100 years ago, is a rare lesion whose nature and origin still remains an enigma. Neumann is credited to have described the first case in 1871 and was responsible for the term "congenital epulis". This name is apt for epulis means "a growth of the gingivae" and the growths are invariably present at birth.

The present case is the only one to be reported by the Division of Oral Medicine and Oral Pathology, Institute for Medical Research, Kuala Lumpur for the past 6 years. Kay et al (1971) in reporting a case of congenital epulis state that the Surgical Pathology Department reported one earlier case during the previous 21 years and the Oral Pathology Department of the Dental School in the same Medical College of Virginia also one earlier case during the previous 18 years. On the contrary, Campbell

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(1955) in reporting six cases claims that the congenital epulis may not be that rare as it appears. Only about 80 cases have been reported in the literature (Birman et al, 1972), and case reports of Asians are even fewer. There is a need therefore to report these rather unusual and obscure congenital lesions so as to enable a better understanding of the condition.

Case Report

A 5-day-old, healthy-looking Chinese baby girl was referred to one of us (K.S.) for a swelling over the maxillary incisor region since birth. On examination an oval, pedunculated, smooth surface, soft tissue growth was present on the maxillary right incisor region. It measured approximately 1.0 x 0.8 cm. and was of the same colour as the oral mucosa (Fig. 1).

This baby girl at birth weighed 7 lbs. 8 ozs. and she was the fourth sibling. The mother did not have any complications during pregnancy and all the other three children were born normal.

The clinical diagnosis of congenital epulis was made and the lesion was excised under ketamine anaesthesia. The histopathology report was also congenital epulis. (Figs. 2, 3, and 4).

Discussion

Congenital epulis occurs at least 10 times more frequently in females than in males (Lucas, 1964). It occurs as a smooth swelling, generally round or oval but sometimes showing irregular lobulation. It may vary in size from about 5 mm. in diameter to 9.0 x 6.0 x 4.0 cm. (Custer and Fust, 1952). It



Figure 1
Shows the oval, pedunculated, smooth surface congenital epulis on the maxillary right incisor region. (Orig. Mag. x).

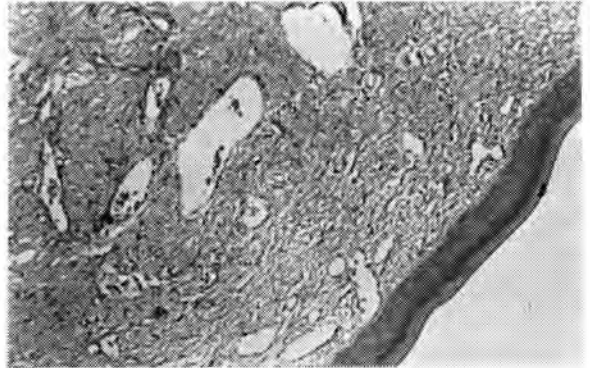


Figure 2
Photomicrograph shows dilated vascular channels lined by a single layer of endothelial cells and closely arranged eosinophilic-staining granular cells separated from the overlying epithelium by a zone of connective tissue. (Orig. mag. x 25).

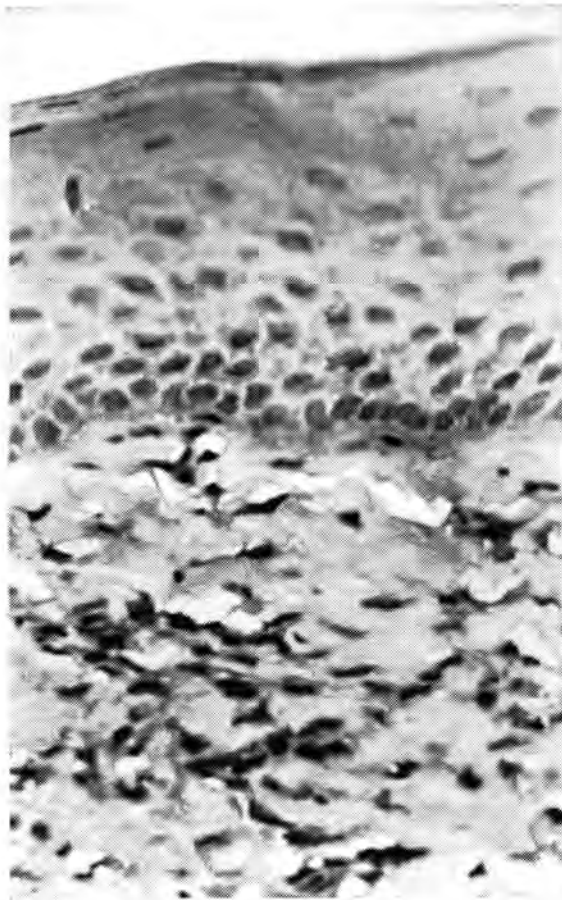


Figure 3
Photomicrograph shows the granular cells separated from the overlying epithelium by a zone of connective tissue which, however, does not form a definite capsule. (Orig. mag. x106).

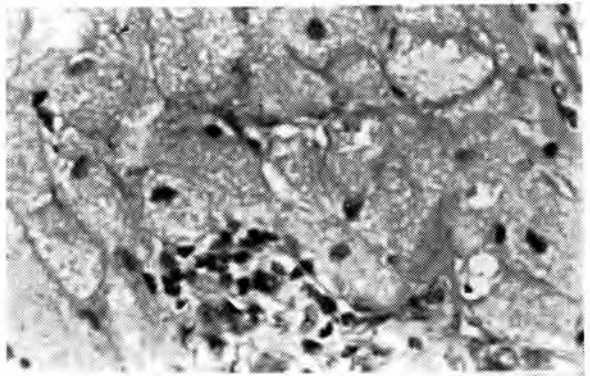


Figure 4
Photomicrograph shows the large and closely packed mostly round or oval granular cells with abundant finely granular cytoplasm and usually distinct cell membranes. The large cells rather dwarf their nuclei, which often eccentric, are vesicular in type and have a clearly defined central nucleolus. PAS. (Orig. mag. x 160).

is usually pedunculated, but may be sessile. The maxilla is more often affected than the mandible, the incisor region being the usual location. Occasionally more than one growth may be present.

Custer and Fust (1952) have made a comprehensive review of the literature. Microscopically, the congenital epulis is very similar to the granular cell myoblastoma. However, the overlying epithelium does not show the pseudoepitheliomatous hyperplasia that is often so prominent a feature of the granular cell myoblastoma.

The origin of congenital epulis is unknown. It has been claimed to originate from: (1) odontogenic epithelium, (2) dental papilla, (3) as a malformation of the developing tooth, (4) to have a relationship with the granular cell ameloblastoma and (5) to be identical to the also little understood and controversial granular cell myoblastoma. Recently Kay et al (1970) in an electron microscopic examination of the congenital epulis found junctional complexes between some of the granular cells suggesting that these cells may be of epithelial origin. But, their studies were not entirely conclusive.

The following features of congenital epulis need special consideration: (1) It has been reported exclusively in the oral cavity; (2) all the lesions have been in the alveolar region; (3) their most frequent occurrence is in the maxillary incisor region, the commonest site for supernumerary teeth, and

(4) odontogenic epithelium has been found in some of these lesions. We consider the congenital epulis to be an odontogenic anomaly.

The overwhelming preponderance of female babies with congenital epulis is rather striking. Custer and Fust (1952) have remarked that this high female sex ratio could occur by chance alone about once in 10 million times. One can speculate hormones may probably play a contributory role in causing congenital epulis, possibly in a manner that may be similar to that in pregnancy gingivitis and pregnancy tumour. The lesion, however, in this case being in the foetus. The prominent vascular channels often seen in congenital epulis would also seem to lend some credence for such speculation.

The treatment of congenital epulis is simple for it is easily removed and does not recur.

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