CONGENITAL FIBROUS EPULIS: A CASE REPORT

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SUMMARY

An unusual case of fibrous epulis in a newborn is presented. The clinical appearance, histological features and method of treatment are described. A short review of the literature is also included.

INTRODUCTION

In the oral cavity, the gingiva is the most frequent site for tissue overgrowths. The majority of these lesions are reactive rather than neoplastic. Within the reactive group the fibrous epulis is the commonest. Detailed studies of this entity and its related lesions had been carried out by Lee.[1]

The fibrous epulis can appear at any age but tends to show a female predominance.[1] Clinically it may present as a sessile or pedunculated mass at the interdental papilla region. The lesion is usually symptomless unless traumatised. In most cases the growth is rather slow. The overlying mucosa may be of normal colour, inflamed or ulcerated.

The purpose of this article is to report an unusual case of fibrous epulis in a newborn.

CASE HISTORY

A two-week-old male infant with a soft tissue swelling in the maxillary region was referred to the Department of Children's Dentistry by a private dental practitioner. The lesion was noticed by the mother at birth. On discharge from the hospital, the parents sought the advice of a dentist as there was bleeding and the baby was fretful during feeds.

Intra-oral examination showed a soft fluctant non-haemorrhagic lesion at the left central incisor region of the maxilla arising from the crest of the alveolus (Fig. I). It was a pedunculated, well circumscribed bean-shaped mass of soft tissue measuring approximately 1.5 x 1.0 x 1.5 cm. The clinical diagnosis was congenital epulis. The lesion was excised a week later and the tissue sent for histological examination.

Histologically, the specimen was found to be composed of fibrous connective tissue which was predominantly collagenous with a small area of

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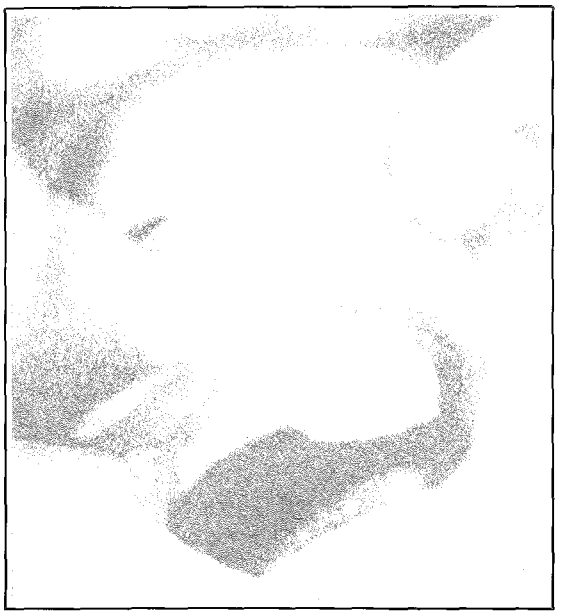

Fig. 1 Photograph showing lesion *in situ.*

loosely fibrillar to myxomatous tissue towards the centre of the lesion. A fair number of fibroblasts exhibiting variable morphology was evident: spindle-shaped, stellate and multinucleated forms (Fig. 2A). The lesional tissue was covered by a thing para-keratinised epithelium with suggestion of pseudoepitheliomatous hyperplasia in one area (Fig. 2B). The histological appearance were those of a fibroepithelial hyperplasia consistent with that of a fibrous epulis.

DISCUSSION

Gingival overgrowths in the newborn are rare. The congenital epulis is a distinctive clinicopathologic entity that is found exclusively in the newborn. It shows a preferential occurrence in the maxillary gingiva and a predilection for female babies.[2,3] Very few cases in male babies have been reported. In the present case the lesion clinically mimicked a congenital epulis as regards its site, presentation and age of occurrence. However, histologically it did not show the large granular cells necessary for the diagnosis of a congenital epulis.

Fig. 2A Photomicrograph showing a fibrous connective tissue stroma and two multinucleated fibroblasts. (Haematoxylin and eosin stain. Original magnification, x 66).

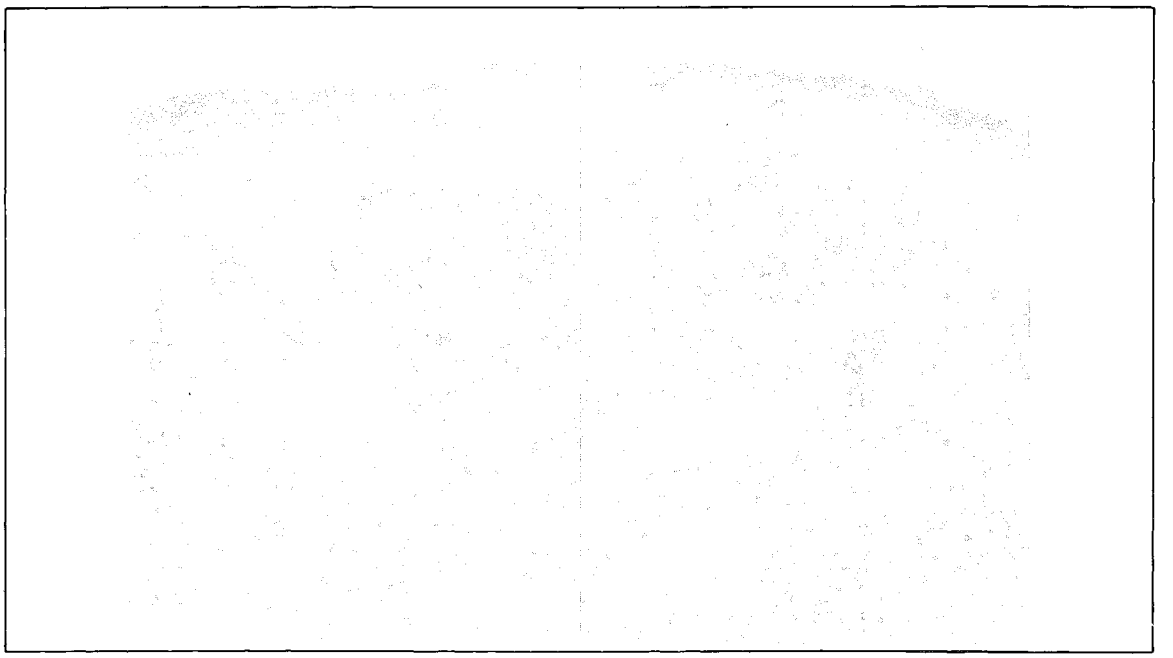

Fig. 2B Photomicrograph of the covering epithelium showing features of pseudoepitheliomatous hyperplasia. (Haematoxylin and eosin stain. Original magnification, x 33).

In the present report three unusual features were noted in the fibrous epulis: pseudoepitheliomatous hyperplasia, myxomatous component within the lesion and the rather varied morphology of the fibroblasts. These merit further discussion.

Based on previous studies, the epithelial covering of the fibrous epulis is usually of variable thickness. There may be acanthosis and hyperparakeratosis. In others superficial ulceration may be present.[2] However, pseudoepitheliomatous hyperplasia has not been previously described. Such an occurrence in the present lesion is therefore considered unusual. The significance of this finding is unknown.

True myxomas of the oral soft tissue are extremely rare. Most that do occur are either direct extensions of central lesions into the soft tissue, oral focal mucinosis or inflammatory hyperplasia exhibiting myxomatous change.[3] In the present case the myxomatous tissue observed in some parts of the lesion probably represents a secondary degenerative phenomenon.[3]

The fibrous epulis consists essentially of a connective tissue exhibiting a variable amount of fibroblastic proliferation and mature collagen bundles. These bundles of collagen may be disposed in an interlacing or criss-cross pattern with no evidence of encapsulation. The fibroblasts are usually mononucleated spindle-shaped or angular cells. In one controversial entity, the giant cell fibroma, the most characteristic feature is the presence of large numbers of stellate and multinucleated giant fibroblasts.[3] A considerable number of stellate and giant fibroblasts were also encountered in the present lesion. Their true significance is unknown.

The fibrous epulis is generally considered an inflammatory hyperplasia whose occurrence is often attributable to some form of chronic irritation or trauma. Possible aetiological factors cited

include irritation from subgingival calculus, a carious tooth or faulty restorations.[2] In the present case it is, however, difficult to perceive the possible causes for this lesion. The mild inflammatory infiltrate observed within the lesion is most probably a response to postnatal trauma, for example, feeding. From the histogenetic viewpoint the lesion could probably be considered a benign hamartomatous entity since it developed *in utero.*

In the present case the post-operative healing was uneventful. Upon review six weeks later, the patient was perfectly normal and healthy. It seems pertinent to mention that whilst the lesion was benign and in no way lethal, the parents could have been spared a great deal of worry if the attending obstetrician had explained the presence of the lesion and the probability that it was non-malignant to the parents.

REFERENCES

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