Peripheral Osteoma of Palate

Dear Editor,

Osteoma was described as a specific entity by Jaffe in 1935 and since then, hundreds of cases have been published which bear out his original criteria stating that there is little evidence to suggest that the lesion, being a benign neoplasm which formed large amounts of osteoid later getting calcified, was a result of an inflammatory process.¹

Shafer et al in 1983 described osteomas as a benign neoplasm characterised by the proliferation of compact or cancellous bone, usually in an endosteal or periosteal location, and rarely entirely in soft tissues.²

The exact aetiology and pathogenesis of peripheral osteoma is unknown. Both hamartomatous and neoplastic factors have been advocated with no definite conclusion.³ We report a case of peripheral osteoma in the palate of a 48-year-old female patient. To the best of our knowledge, this is only the second reported case of palatal peripheral osteoma.

Case Report

A 48-year-old female patient presented to our department with a chief complaint of palatal swelling which was slow in growth, painless, and was present from the last 8 months. On oral examination, a firm, lobulated, well circumscribed, and exophytic mass of $1.5 \, \text{cm} \times 2 \, \text{cm}$ in diameter was found

on the maxillary posterior right palatal area. Intra-oral periapical radiograph revealed a patchy radiopacity (Fig. 1).

Surgical excision of the lesion was done under local anaesthesia and excised tissue was sent to the oral and maxillofacial pathology department (Fig. 2).

Histopathological examination revealed parakeratinised stratified squamous epithelium. The subepithelial core of connective tissue was made up of collagen fibres and fibroblasts (Fig. 3). The deeper connective tissue showed a capsule of bone surrounding the adipose tissue (Fig. 4). Osteocytes were also observed within the trabeculae (Fig. 5). After the correlation of all the clinical and histopathological features, we reached the final diagnosis of peripheral osteoma.

Discussion

Peripheral osteomas are normally an incidental finding since they are asymptomatic but depending on the location and the size of the lesion, they can cause facial deformity.⁴ Osteomas can occur at any age but are found most frequently in young adults. Osteomas in the maxillofacial region have been reported in patients between the ages of 29.4 and 40.5 years. Osteomas usually remain less than 2 cm in size after years of slow enlargement.⁵



Fig. 1. Patchy radiopacity seen in radiograph.



Fig. 2. Excised specimen sent for histopathological examination.

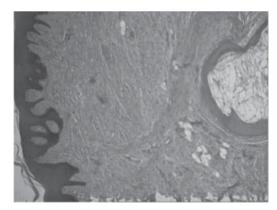


Fig. 3. Parakeratinised stratified squamous epithelium and connective tissue (haematoxylin and eosin (H & E) stain 10 X).

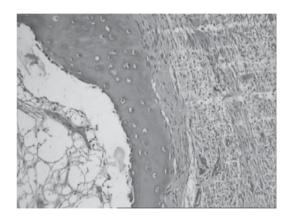


Fig. 5. High power view showing osteocytes within the bone and adipose tissue (haematoxylin and eosin (H & E) stain 10X).

Osteomas can be classified as being solitary or multiple; the latter are mainly associated with Gardener's syndrome. Gardener syndrome is a rare autosomal dominant genetic disorder characterised by multiple colorectal adenomatous polyps and extraintestinal lesions such as multiple osteomas, multiple impacted teeth, multiple odontomas and mesenchymal tumours of skin and soft tissue. 7

Osteomas are more frequent in males than in females by approximately 2:1.² Extragnathic osteomas are more commonly found in the cortical plate of long bones such as the femur and the tibia.⁴ In the maxillofacial region, osteomas occur most frequently in the sinuses. The most common site is the frontal sinus, followed by ethmoidal and maxillary sinuses.¹⁻³ Other locations include the external auditory canal, orbit and temporal bones, and pterygoid plates.³ With regard to facial bones, osteomas are more common in the mandible than in the maxilla and lingual surface of the mandibular body posterior to premolars and the lower border in the angle region.¹ The palate is a

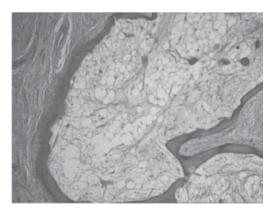


Fig. 4. Thin core of cancelous bone surrounded the adipose tissue (haematoxylin and eosin (H & E) stain 10X).

very unusual site for osteomas. We had gone through the PubMed literature and could find only a single case report. Conventional radiological examinations are generally sufficient to diagnose an osteoma. Radiographically, it appears as a unilateral, pedunculated, well-defined, oval or round mushroom-like radiopaque mass with similar density to normal bones. Histologically, osteoma consists of mature, lamellar bone with minimal marrow tissue (compact osteoma) or of trabeculae of mature lamellar bone with intervening fatty or fibrous marrow (cancellous osteoma). There are no reports of malignant transformation of peripheral osteoma. Asymptomatic lesions are left untreated and regular follow-up is done. Surgery is indicated when there are symptoms, deformity, or if the lesion presents active growth. Recurrence is extremely rare.

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