Short communication

Treatment of mandibular glandular odontogenic cyst with immediate reconstruction: case report and 5-year follow-up

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Abstract

Glandular odontogenic cysts of the jaw are rare with unusual histopathological features, well-defined limits, and a high recurrence rate when treated conservatively. We describe a 37-year-old white man with such a cyst of the right mandible that was resected, and at follow-up 5 years later there were no signs of recurrence.

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Introduction

Glandular odontogenic cysts were first reported in 1987 by Padayachee and Van Wyk who named them sialodontogenic cysts.1 They were renamed glandular odontogenic cysts by WHO in 1992 as there was no evidence of salivary gland origin.2

The lesion is more prevalent in middle-aged adults, and although it may be found in both jaws, most are in the mandible.3–5 Its size may vary.6 Radiographically it is a bony, unilocular, or more commonly multilocular, radiolucent lesion with well-defined limits.2,6–10

Case report

A 37-year-old white man was referred with a swelling on the labial aspect of his right mandibular body. The gingival and alveolar mucosa were within normal limits. The panoramic radiograph showed a well-defined, multilocular, radiolucent lesion extending from the right lateral incisor to the ipsilateral third molar (Fig. 1). There was no evidence of resorption of the root or displacement of the teeth. Histological examination of an incisional biopsy specimen confirmed glandular odontogenic cyst.

Under general anaesthesia, the buccal cortical bone was removed through a submandibular incision followed by careful curettage to avoid damage to the inferior alveolar nerve. Peripheral ostectomy was done to eliminate extensions of the cyst. A 2.4 mm bone reconstruction plate was inserted to prevent a pathological fracture, the buccal cortical bone was put back in place and fixed with a 2.0 mm plate and a 3/0 nylon suture in the 2.4 mm plate to reconstruct the bony defect (Fig. 2). The wound was closed in layers and healed.
uneventfully. At 5-year follow-up healing was satisfactory with no signs of recurrence (Fig. 3).

Discussion

According to Toida et al.\textsuperscript{5} it is important to differentiate these cysts from mucoepidermoid carcinoma, particularly the low-grade and predominantly cystic type. Recurrence is partly related to the thin capsule and to the presence of microcysts, which may make complete removal difficult. However, the tendency to grow invasively through medullary spaces is the most important factor.\textsuperscript{9} Local en bloc excision is the preferred treatment.

Because glandular odontogenic cysts were described only recently, and a limited number of cases have been reported,
doubts remain about their biological behaviour, appropriate treatment, and prognosis.

References