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Epidermoid Cyst of the Mandible: a Case Report

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We report a rare case of intraosseous epidermoid cyst in mandibular body. A non-symptomatic patient without trauma history had a cystic lesion on mandible close to the third molar. The lesion was enucleated while extracting of left lower third molar. The microscopic findings were consistent with an epidermoid cyst.

Key words: Epidermoid Cyst, Intraosseous, Mandible

I. INTRODUCTION

Epidermoid and dermoid cysts of head and neck represents only about 7% of the total numbers found in the body1). And only 1.6% involves the oral cavity2). Their intraosseous presentation is extremely rare.

II. CASE REPORT

A 22-year old female patient was referred to our clinic for treatment of cystic lesion on mandible. She had no symptoms, and her orthodontist, who found the lesion on the dental panoramic radiograph (Fig. 1), recommended her to see an oral and maxillofacial surgeon.

She had no underlying diseases or notable familial histories. On clinical examination, there was no pain, swelling, trismus or neurologic deficiency. On the CT images, there was a cystic lesion sized about 1.5 cm × 0.9 cm × 1.3 cm on the left mandibular body area, which was associated, but separated, with the impacted third molar (Fig. 2). Lingual cortex was expanded and thinned, but not perforated. There was no root resorption. A differential diagnosis of dentigerous cyst or odontogenic keratocystic tumor was made. The cyst was removed after surgical extraction of the left lower third molar (Fig. 3). The cyst was communicated but clearly separated with the tooth socket (Fig. 4). And it was not attached to the tooth. Histopathological examination showed cystic lesion lined by hyperplastic squamous epithelium with lamellated keratin within the lumen (Fig. 5), which was consistent with an epidermoid cyst.
III. DISCUSSION

Epidermoid cysts are considered to be either acquired or congenital. Acquired epidermoid cysts are also referred to as ‘implantation cysts’, and thought to originate from either accidental or surgical inclusion of covering epithelium into deeper tissues. But our patient had no trauma or surgical history. And the lateral location makes it difficult to suppose it’s congenital. But if ectodermal tissue was included in the mesenchyme during embryogenesis and migrated during mandibular growth, it could be found on other than the midline, though it’s congenital.
Bodner et al. have explained that metaplasia of dentigerous cysts epithelium is the reason of intraosseous epidermoid cysts. In this case, the lesion did not enclose the crown nor be attached at the cemento–enamel junction of the tooth. Moreover, dental follicle of this tooth existed independently of the cyst. Based on these findings, there seems to be little chance of the cyst to have originated in the dentigerous cyst.

The cyst was enucleated thoroughly and the lesion healed well. There are a few reports on epidermoid cysts transforming into malignant tumors. Incomplete excision may lead to recurrence of cyst, and the remnants could transform. So, early detection and removal should be emphasized.

Epidermoid cysts usually involve soft tissues, and intraosseous presentation is extremely rare.

Stating the importance of each new case of intraosseous epidermoid cyst of the jaws, we report a new case of intraosseous epidermoid cyst affecting the mandible.

IV. REFERENCES

