CASE REPORT

Inferior alveolar nerve paresthesia related with a complex odontoma in the posterior mandible: A case report

Posterior mandibuladaki kompleks odontomaya bağlı inferior alveolar sinir parestezisi: Bir olgu sunumu

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SUMMARY
Odontomas are odontogenic benign tumors composed of dental tissues. These lesions are classified into two types: complex and compound odontoma. Although most of these lesions are asymptomatic and are often detected on routine radiographs, sometimes they can cause over-retention, impaction and delayed eruption of both primary and permanent teeth. In this case report, we will present a case of 32-year-old female with complex odontoma superior to inferior alveolar canal in the left posterior mandible with inferior alveolar nerve paresthesia and the resolution of paresthesia after surgical removal of the lesion.
Keywords: Complex odontoma, inferior alveolar nerve, paresthesia.

ÖZET
Odontomalar dental dokulardan meydana gelen selim odontojenik tümörlerdir. Bu lezyonlar kompleks ve kompaund olmak üzere iki sınıfa ayrılırlar. Bu leyzonların birçoğu asemptomatik olmalarına ve alınan rutin radyografilerde belirlenmelerine rağmen; bazı durumlarda süt veya sürekli dişlerin gömülü kalmalarına ya da geç sürmelerine neden olmaktadır. Bu vaka raporunda, 32 yaşında bir kadın hastanın inferior alveolar kanalın üzerinde yer alan kompleks odontomanın inferior alveolar sinirde neden olduğu parestezi ve lezyonun cerrahi olarak uzaklaştırılmasını takiben parestezinin ortadan kayboluşu sunulmuştur.
Anahtar Kelimeler: Kompleks odontoma, inferior alveolar sinir, parestezi.

INTRODUCTION

Odontomas are odontogenic benign tumors composed of dental tissues. They are actually hamartomas or developmental anomalies composed of enamel, dentin, cementum and pulp tissue (1). According World Health Organization (WHO), these lesions are classified into two types as compound and complex. The compound odontoma is a disfigurement in that all the dental tissues are in a more arranged shape than in the complex odontoma. In compound odontomas, tooth-like structures, enamel, dentin, cementum and pulp are organized as in the normal tooth. Complex odontomas appear as an amorphous mass of enamel and dentin, most commonly in the molar areas of the jaws. A complex odontoma may be confused with an osteoma (1-3).

Although most of these lesions are asymptomatic and are often detected on routine radiographs, sometimes they can cause over-retention, impaction and delayed eruption of both primary and permanent teeth (4). In this case report,

we will present a case of 32-year-old female with complex odontoma superior to inferior alveolar canal in the left posterior mandible with inferior alveolar nerve paresthesia and the resolution of paresthesia after surgical removal of the lesion.

CASE REPORT

A 32-year-old woman was referred to our clinic with a complaint of a paresthesia on her left lower lip. Past medical history was unremarkable. Intraoral examination revealed that tooth number 36 and 37 were missing and surrounding mucosa was normal (Figure 1). On OPTG,

Figure 1: *Surrounding mucosa is normal.*

there was a radiopaque lesion with well-defined borders in posterior mandible neighboring inferior alveolar canal (Figure 2). On CBCT, the bone between the lesion and the

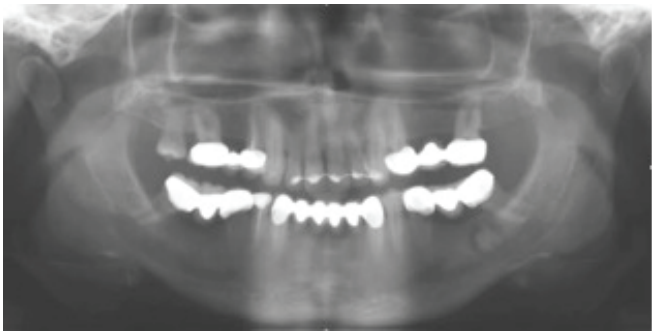

Figure 2: *A radiopacity with well-defined borders in the posterior mandible.*

inferior alveolar canal; lingual and buccal bone were intact (Figure 3). The main diagnosis proposed was odontoma while differential diagnosis included osteoma, condensing osteitis and idiopathic osteosclerosis. Total surgical removal

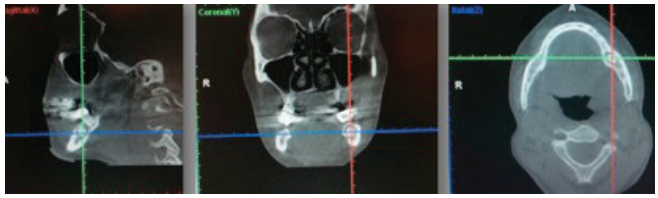

Figure 3: *The bone surrounding the lesion was intact.*

was performed (Figure 4). Antibiotics (Amoxicillin and Clavulanate) and corticosteroids (Prednisolone) were prescribed for ten days. After two weeks, the paresthesia

Figure 4: *Total surgical removal was performed.*

was controlled and after one month of the surgery, the paresthesia disappeared completely. The lesion was histopathologically diagnosed as complex odontoma, containing irregular dental structures.

DISCUSSION

Odontomas are the most common type of odontogenic tumors. Some authors prefer to call it as a hamartoma, not a true tumor. These lesions are classified into two types: complex and compound odontomas. The term "complex" refers to the haphazard arrangement of tooth elements such as enamel matrix, enamel, tubular dentin, and pulpal tissue, while the term "compound" refers to the aggregate of recognizable teeth (1, 3). Both types of odontoma are primarily diagnosed in children, adolescents, and young adults with no gender predilection (5). Complex odontomas occur mostly in the posterior part of the mandible like in this case. Radiographically, three different stages can be detected depending on the degree of calcification of the odontoma. In the first stage, the lesion appears radiolucent due to the lack of calcification, intermediate stage is characterized by partial calcification and in the final stage the odontoma appears as a radioopaque mass that is surrounded by a radiolucent halo. It presents as a well-defined radiopacity, with a density greater than bone, and equal to the teeth (4). A connective tissue capsule like a tooth follicle surrounds it.

Odontomas are commonly asymptomatic. Clinically, they can cause retention of deciduous teeth, pain, expansion of the cortical bone and tooth displacement (5). In these cases, it is mandatory to use additional imaging techniques like CBCT. In this way, the relationship between anatomical

structures and the lesion could be observed and the result after surgical removal could be predicted. Mostly these lesions are asymptomatic and they go undiagnosed until causing any developmental, anatomical or physiological complication (6). Because of that, routine radiographs like OPTGs could help to early detection of such lesions.

In this case, odontoma was located superior to inferior alveolar canal in the left posterior mandible and it was causing inferior alveolar nerve paresthesia. In this case, it is suggested that odontoma is in the final stage. Because of this features, after performing surgical removal, with the elimination of the pressure of the odontoma on the nerve, the resolution of paresthesia occurred in two weeks.

CONCLUSION

In this case report, complex odontoma which causes inferior alveolar nerve paresthesia was presented. After surgical removal, the effect of the odontoma resolved completely. But in some cases, these masses could lead to more serious and irreversible maxillofacial deformities. Routine radiographic control is suggested to detect such lesions early.

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