

Geriatric mandibular impacted canine surgical removal: A rare case

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ABSTRACT

Impacted mandibular canine are less common than impacted maxillary canine. The surgical removal of impacted mandibular canine in geriatric patients that has increased morbidity rate due to the physical characteristic of the body of the mandible is altered. The advancing age, residual ridge resorption, and decreased vascularity impairs the mandibular bone strength, predisposing it to fracture during the surgical removal of impaction and even to spontaneous fracture. This paper describes the surgical removal of mandibular canine impaction in a 55-years-old male patient.

Key words: Geriatric impaction, Mandibular canine impaction, Surgical removal of canine

INTRODUCTION

In humans, the most important role in dentition is canine teeth. It is present in the maxilla as well as in the mandible; most important of canine teeth is function and esthetics. Canine teeth have a longest root structure so the eruption time is more when comparing to the other teeth in the oral cavity. Normally, mandibular canine impaction occurs in very less frequency. In our case report, a geriatric patient had a mandibular canine impacted tooth associated with pain following by self-fall and misdiagnosed as a swelling due to trauma by a general physician before referring the patient to a dentist.^[1,2]

CASE REPORT

A 55-year-old male reported to our clinic with the chief complaint of pain and swelling in the anterior lower

edentulous jaw region since 2 weeks. Past history revealed that he had a self-fall before 1-month and consulted a general physician immediately. He prescribed a full course of antibiotics and anti-inflammatory drugs. On thorough clinical examination, it was revealed that there was a swelling, which was hard and tender over the lower anterior edentulous jaw. The mouth opening was restricted. Orthopantomogram shows that there was no evidence of mandibular fracture but the lower part of the anterior mandibular region 33 got impacted [Figures 1 and 2].

TREATMENT

Patient has undergone routine blood investigation and cardiorespiratory status which were normal. Surgical site was prepared with povidone-iodine. Under local anesthesia, a crestal incision was made over the edentulous ridge in relation to 32-43 regions. The mucoperiosteal flap was

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reflected and bone over the impacted tooth was trimmed with a surgical bur [Figure 3]. Once the impacted canine was exposed, it was sectioned into crown and root separately. First, the coronal part of impacted canine was removed, and subsequently the root was removed [Figure 4]. The socket was irrigated with saline and adequate wound debridement was done. Then it was sutured with 3-0 black silk suture [Figure 5]. The suture was removed after 7 days and postoperative healing was satisfactory.

DISCUSSION

Failure of eruption of the mandibular canine is an unusual event. Definitely, maxillary canine impaction is more frequent than mandibular canine impaction. There are many reasons why canine fails to erupt.^[2] Most surgeons agree the reasons may include suspected pathological conditions, infection interference with prosthetic devices, disturbance of the existing dentition pain, and ectopic eruption. Impacted mandibular canine are also more likely to be located on the labial aspect of the dental arch than on the maxillary canine, the removal of impacted

tooth routinely involves an intra-oral surgical approach. Most impacted teeth are asymptomatic, but chronic infections and fistula formation and some symptoms such as pain and swelling have been reported in the literature. There are several treatment options proposed for the impacted mandibular canine, including surgical removal, exposure and orthodontic alignment, and transplantation and observation in the aged and edentulous mandible. Impacted canine not only weaken the mandible, which is more prone to cause fracture but also act as focal of infection. So, surgical removal is the better option for those patients. However, in young patients if adequate space for the alignment of an impacted mandibular canine exists and it is mechanically possible to reposition an impacted mandibular canine into proper position, then orthodontic treatment is indicated following surgical exposure.^[3,4] Impacted tooth may be allowed to erupt passively, especially if it has a favorable angulation. In our patient, radiograph shows that horizontally impacted canine in the labial side of the anterior mandible, which was asymptomatic before the self-fall of the patient. For this patient, we have done the surgical removal of mandibular canine.

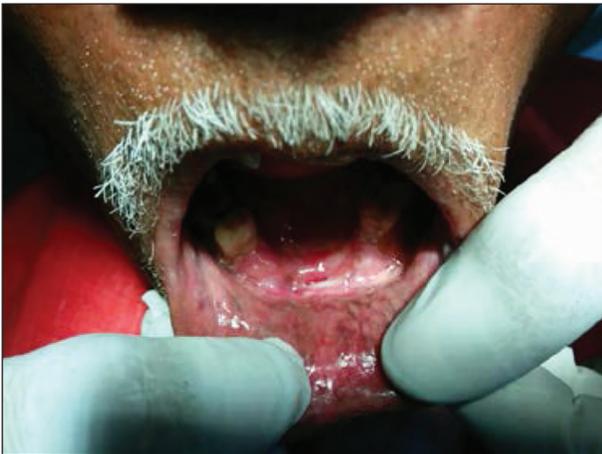


Figure 1: Preoperative edentulous region



Figure 2: Radiograph showing impacted canine



Figure 3: Exposed mandibular canine



Figure 4: Extracted canine



Figure 5: Primary closure

CONCLUSION

Usually, younger patients have impacted canine, which can be encountered during the preevaluation of orthodontic treatment. Depends upon the angulations and position treatment choice of impacted canine differs as we discussed.

However, this article, coined that rare case of geriatric impacted mandibular canine causes pain and swelling after self-fall, which is treated by the surgical removal of mandibular canine. We conclude that proper clinical and radiological evaluation plays a major role in the geriatric patients.

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Conflicts of interest

There are no conflicts of interest.

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