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RESEARCH ARTICLE

REMOVAL OF ECTOPIC CANINE OF THE NASAL FOSSA: CASE REPORT.

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Abstract

Introduction: The ectopy irruption is understood as the impossibility of dental eruption through deviations in its pattern of eruptive normality, due to the fact that it is the dental group with an eruptive trajectory and more difficult development, the canines suffer greater impaction and ectopic eruption, losing only to the upper molars. The surgical treatment for its removal is one of the alternatives when orthodontic traction is not feasible. **Case Report:** AMMF patient, 13 years old, feoderm, attended in a private clinic, complaining about the absence of a permanent non-fractured dental element. A clinical and radiographic examination was performed and it was observed that the element 23 was impacted and inverted at the canine fossa level. We opted for surgical removal due to the impossibility of orthodontic traction. **Final Considerations:** It is concluded that clinical exams together with radiological images are of great importance for the planning of more effective and more accurate treatments for cases of ectopic canine removal from the nasal fossa.

Introduction:-

One of the teeth most affected by ectopic eruption and impaction is the canine; Impaction can occur uni or bilaterally, affecting 1% to 3% of the global population, with a higher incidence in the female gender. This dental group has important functionality to guide occlusion, better proprioception and greater distance of fulcrum, still playing an important role in the harmonization of the face while providing aesthetics[1].

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The most common causes for local and general ectopic impaction and eruptions are, respectively, discrepancy of dental arch size, ectopic position of the dental germ, febrile diseases, irradiation among others. For a better diagnosis and offer of more effective treatments for impacted canines and with ectopic irruption, a clinical evaluation is necessary in which the inspection and palpation are necessary together with the examinations of radiological order[2].

Frequent problems are impacting canines and their ectopic eruption in dental offices due to the fact that the last teeth erupt, becoming vulnerable to any alteration of the environment, impaction occurs bilaterally from 8% to 25% of the world population, occurring by vestibular face Three times less than the palatine side. Impotence as well as ectopic irruption more frequent in women than men, with a higher prevalence in the jaw[3].

Dental ectopic eruption as well as impaction are frequent problems in dentists' offices. The ectopy irruption is understood as the impossibility of dental eruption through deviations in its normal eruptive pattern, such as: abnormal position of the dental germ, ankylosis, lack of root resorption of the deciduous tooth, trauma of the germs of the teeth as well as its rotation in Permanent teeth, abnormal muscle pressure, dental arch size discrepancy, febrile diseases, irradiation among other factors. It is estimated that 20% of the world population presents ectopia or dental impaction[4].

Losing only to the molars, the superior canines are the tooth group that suffer most from impaction and ectopia, because they have a long eruptive path due to their location near the piriform fossa, taking twice as long to erupt when compared to other dental elements. Canine ectopia can occur uni or bilaterally, affecting 1% to 3% of the global population, with a higher incidence in the female gender, occurring on the vestibular face three times less than on the palatal side. This dental group has important functionality to guide occlusion, since it defines moments of laterality, suffers better proprioception, promotes greater fulcrum distance, and plays an important role in the harmonization of the face while providing aesthetics[5].

The choice of more effective treatments for impacted canines and with ectopic irruption depends on the location in which the element is positioned, if its position is vertical or horizontal, of the morbidity presented by the element, being more advisable when there is no impossibility of orthodontic traction , Surgical removal, and impaction in the ectopic position in the maxillary interior cause root resorption of the neighboring dental elements, as well as the possibility of pericoronarites or even tumors[6-7].

The present study aims to report a clinical case in which a canine was removed in an ectopic position in the nasal fossa region, in a way that elucidates the reader the fastest and most correct way to remove it.

Case Report:-

Patient A.M.M.F, female, 13 years old, leucoderma, with permanent dentition; During the clinical examination there was no painful symptomatology, and no change was noteworthy, thus more invasive examinations were requested to allow greater detail to be obtained for the case in question.

Teleradiography revealed the impactation of the ectopic element 23 in an inverted position with vestibularized location and close proximity to the roots of the second left premolar and wall of the left maxillary sinus, whose crown was positioned obliquely to the infraorbital foramen , With roots close to the maxillary body (Fig. 1). The treatment instituted for the case was surgical removal, making orthodontic traction unviable. For better management of the surgery, a lateral cephaladiography (Fig. 2) and frontal cephalogram were performed, allowing a better localization of the element 23 (Fig. 3).

Figure 1:- Frontal teleradiography showing the root of element 23 in proximity to element 25.

Figure 2:- Teleradiography lateral of the right side.

Figure 3:- Left teleradiography evidencing the obliquity of the ectopic element in relation to the infraorbital form.

The surgery was performed with regional anesthesia (Lidocaine with epinephrine 1: 200,000), blocking the maxillary nerve, obtaining access from the surgical flap to the canine fossa (Fig. 4). Then, the osteotomy and odontostomy were performed to remove the tooth with the aid of the 702 drill bit attached to the low-rotation pen and straight part, with abundant irrigation of sterile saline solution. After removal of the tooth along with the pericoronary hood (Fig.5), the external suture was made with Silk 4.0 (Fig.6) and maintained for 10 days.

The imaging tests had a significant importance, allowing better information on the shape of the tooth, its localization in the neighboring tissues composing a better surgical planning, orthodontic traction was ruled out due to inappropriate angulation of the element 23 and surgery was chosen to remove it. The anesthetic technique of the maxillary nerve, intraoral access and osteotomy of the region in question.

Figure 4:- Access to the canine fossa and element 23.

Figure 5:- Removal of the ectopic element with the pericoronary hood.

Figure 6:- Final aspect of the region, with suture maintained for 10 days.

Final considerations:-

It can be concluded from this study that:-

Impacted and ectopic canines when unviable orthodontic traction have surgical viability for their removal, by means of a clinical and radiological examination to better orient and form the treatment plan for the patient, in order to maintain aesthetic and dental functioning in balance.

Conflicts of interest:-

The authors declare that there are no conflicts of interest.

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