

ACTA SCIENTIFIC DENTAL SCIENCES (ISSN: 2581-4893)

Volume 8 Issue 1 January 2024

Clinical Case Report

Clinical Case Report on Orthodontics

Yolanda Garcia Garcia¹ and Vicente Carrasco^{2*}

¹Department of Orthodontics and Dentofacial Orthopedic, Zacatecas, Mexico

²Department of Oral Implantology and Rehabilitation, Institute of Dental Sciences, Zacatecas, Mexico

*Corresponding Author: Vicente Carrasco, Department of Oral Implantology and Rehabilitation, Institute of Dental Sciences, Zacatecas, Mexico.

DOI: 10.31080/ASDS.2024.08.1756

Received: November 10, 2023
Published: December 11, 2023

© All rights are reserved by Yolanda Garcia

Garcia and Vicente Carrasco.

Abstract

Retained canines are those found within the jaws, whether or not they are fully formed. It is known that canines are the teeth, after the third molars, with a hiher prevalence of not erupting, wich is considered included. In any young female patients, it has an average prevalence of around 32%.

Keywords: Canine; Impacted; Angulation

Case Report

Patient female, 13 years old, who presents for consultation because she reports having "small" teth, upon clinical examination, it was observed: Angle's Class I molar, the canine is not assesable due to the absence of the aforementioned teeth in the mouth.



Figure a

On radiographic examination, both upper canines were seen included, with both primary canines prevailing. On the right side the permanent canine has an angle of 52°, and on the left side it has an angle of 45°, according to Warford's analysis, the eruption prognosis says that it has a por prognosis when the angle formerd between the bicondylar line drawn on the panormic radiograph and the longitudinal axis of the canine is less than 59°.



Figure b

The lateral skull x-ray shows that both permanent canines are located towards the vestibular, according to their angulation, being less tan 59° according to Warford, the prognosis is not very favorable, however, the patient's age, allow, a favorable result may occur to help the canines be in their rightful place, the temporary canines functioned as a space mainteners.



Figure c

According to Rickets, cephalometry, the overbite and overjet values are within the norm, being of a mesofacial biotype.

The treatment plan consisted f maintaning Angle ClassI, maintaining the patient's overbite and overjet, and achieving incisive guidence and canine guidence. As a part of the treatment, teeth 53 and 63 were extracted, and Roth type Brackets with 0.022 slot were placed. Enough space was made for the permanente canines and a double arch was used; Steel 0.018 X 0.025 and NiTi 0.014 for canine traction. As anchorage, a lingual arch was used for intermaxillary elastics to preserve the Class I molar and transpalatal bar as vertical anchorage.



Figure d



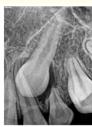


Figure e: Initial periapical radiographs.





Figure f: Periapical radiographs with treatment advancement, after having achieved the space to bring the canines into place within the arch





Figure g: Periapical x-ray of the progress of the treatment, already tractioning both canines.





Figure h: Periapical radiographs in wich both canines can be seen in the mouth.



Figure i: The space generated with the treatment.



Figure j: The surgery was performed only in the left side, on the right side, as the canine had space, it descended on its own, althoug with gyroversion.

Aflap was made to reveal the tooth and a button was placed on the buccal Surface of the canine. The treatment duration was 18 months.



Figure k

The canine on the right side erupted with gyroversion and a cupla with buttons was placed to derotate it. On the left side, the bracket was placed with tipping to straihten the root mesially.

The patient is temporraly discharged, to later perform a gingivoplasty and the removal of the third molars.



Figure l

The final result agrees with the treatment plan, your orthodontic treatment Will be monitored to ensure that it continues correctly. Every six months it Will be monitored with periapical radiographs to have control with teeth 11, 21 and 22, due to the presence of resorption of the root ápex, according to the final orthopantomograph.



Figure m

The prognosis is favorable for incisor 21 and 22, since the damage caused to the apices is minimal and the rescue of both canines was achieved; according to Becker, in a significant proportion of patients with impacted canines in whom root resorption has already occured, they will eventually erupt and the incisor root will suffer Little or no subsequent resorption in the long term.

Bibliography

- Barbosa Jurandir Antonio. "Orthodontics with excellence Volume II". AMOLCA (2015).
- Becker Adrian. "Orthodontic treatment of impacted teeth". AMOLCA (2013).
- 3. "DETERMINATION OF PROGNOSIS IN PATIENTS WITH IMPACTED MAXILLARY CANINES". "scielo.org. (2009).
- Escoda Cosme Gay and Leonardo Berini Aytés. "Oral surgery treatise". Barcelona: OCEANO/ERGON (2004).

 Maria Peñarrocha Diago and Miguel Peñarrocha Diago. "Atlas of Oral Surgery and Orthodontics". Madrid: ERGON (2016).