

Complex treatment of Dens Invaginatus and associated aberrant morphology

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I. Introduction

Dens invaginatus is a rare dental anomaly that may give rise to many complex anatomical forms. The complexity of the internal anatomy may create challenges for the complete removal of the diseased pulpal tissue and the subsequent sealing of the canal system. Therefore, surgical treatment should be considered in cases of endodontic failure and in teeth which cannot be treated non-surgically because of anatomical problems or failure to gain access to all parts of the root canal system.

II. Case Presentation

<Case 1.>

1. Sex/Age : M / 11
2. Chief Complaint : Malformed tooth & Rt. Cheek swelling
3. Present Illness : #13 Per(+), Mob(+), Pal(+), Periapical radiolucency, Buccal & Extraoral swelling
4. Impression : Dens invaginatus Type III with Acute apical abscess
5. Tx Plan : I & D refer to OMFS, Root canal treatment & Apical surgery

<Case 2.>

1. Sex/Age : M / 15
2. Chief Complaint : Malformed tooth & caries treatment
3. Present Illness : #12 Per(-), Mob(-), Pal(-), occlusal caries (C3), Periapical radiolucency
4. Impression : Dens invaginatus Type III with Chronic apical periodontitis
5. Tx Plan : Root canal treatment & Apical surgery

III. Conclusion

Dens invaginatus is a treatment challenge since it may have a complicated morphology and complex system of root canals. Therefore, detailed radiographic examinations from various angles are essential and CT taking is strongly recommended. Depending on the degree of malformation and on the presence of clinical symptoms, there are different treatment modalities. Treatment of teeth with Type III dens invaginatus, especially communicating to the periradicular area is more complicated and ranges from nonsurgical root canal treatment to surgery or extraction.