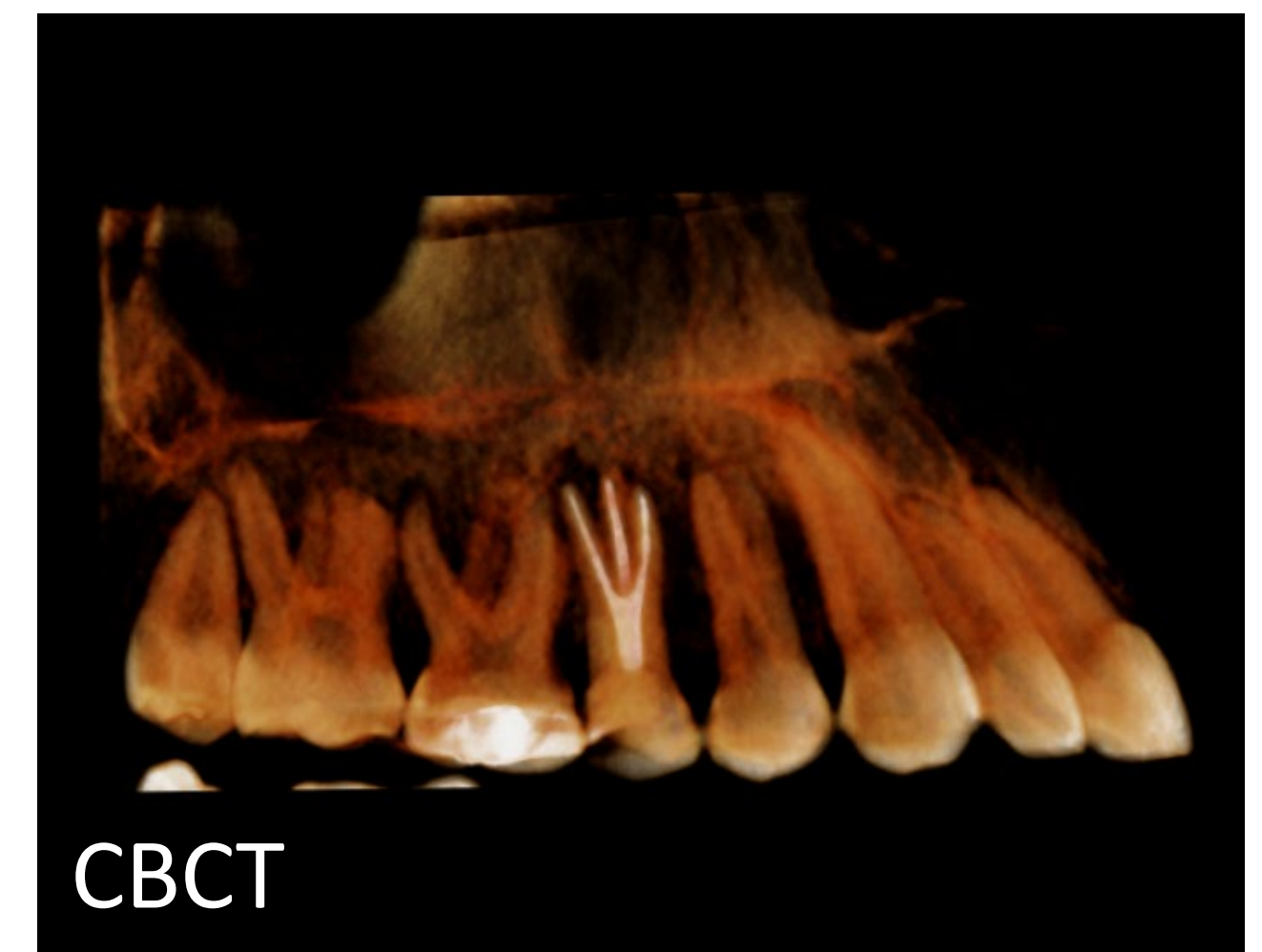
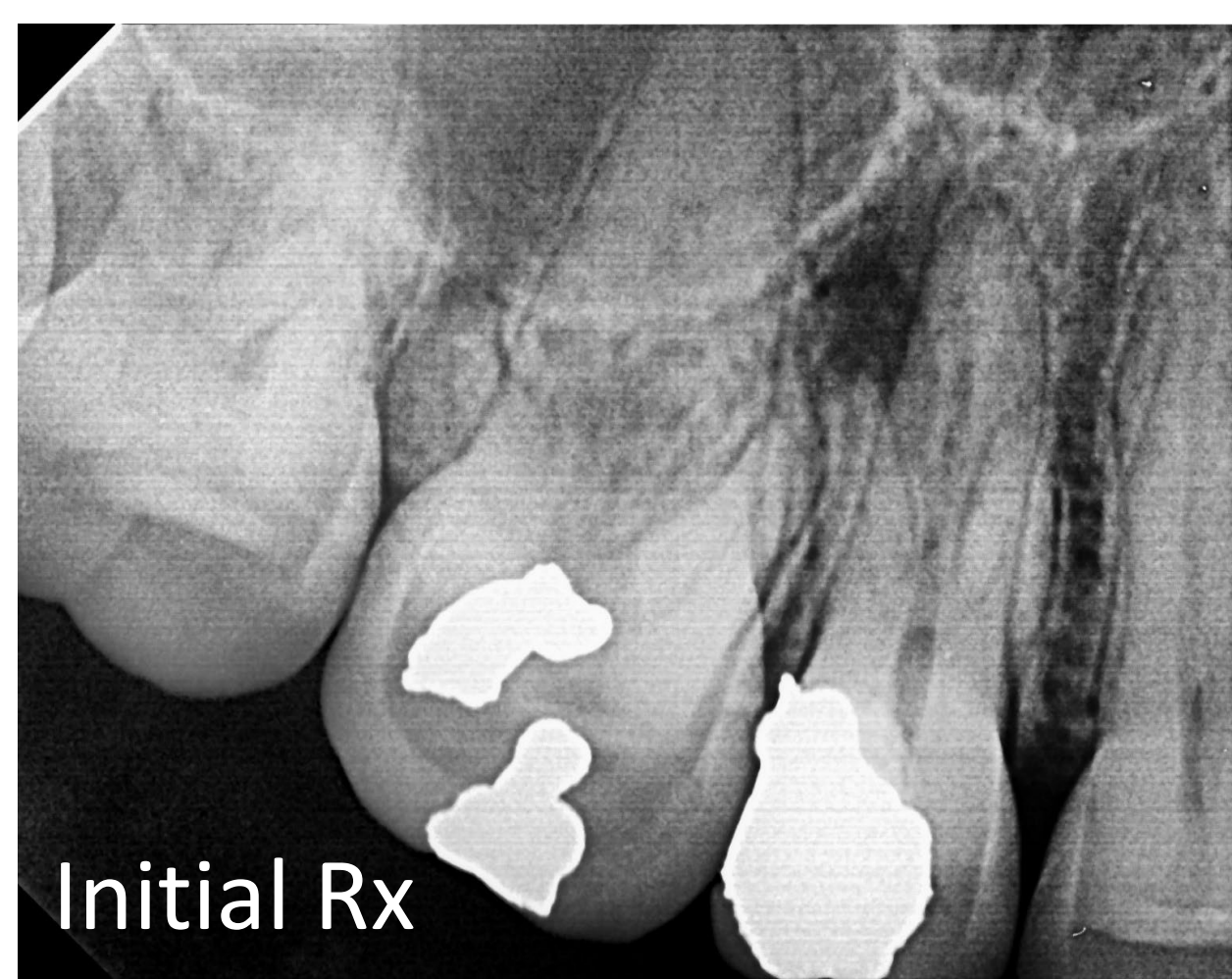


INTRODUCTION

Knowledge of the anatomy of root canal systems is imperative to increase the success rate of endodontic treatment, where variability represents a clinical challenge. The global literature reports 0-1% presence of three roots in maxillary second premolars. In addition, chronic pathologies and root resorption can complicate treatment and long-term success.

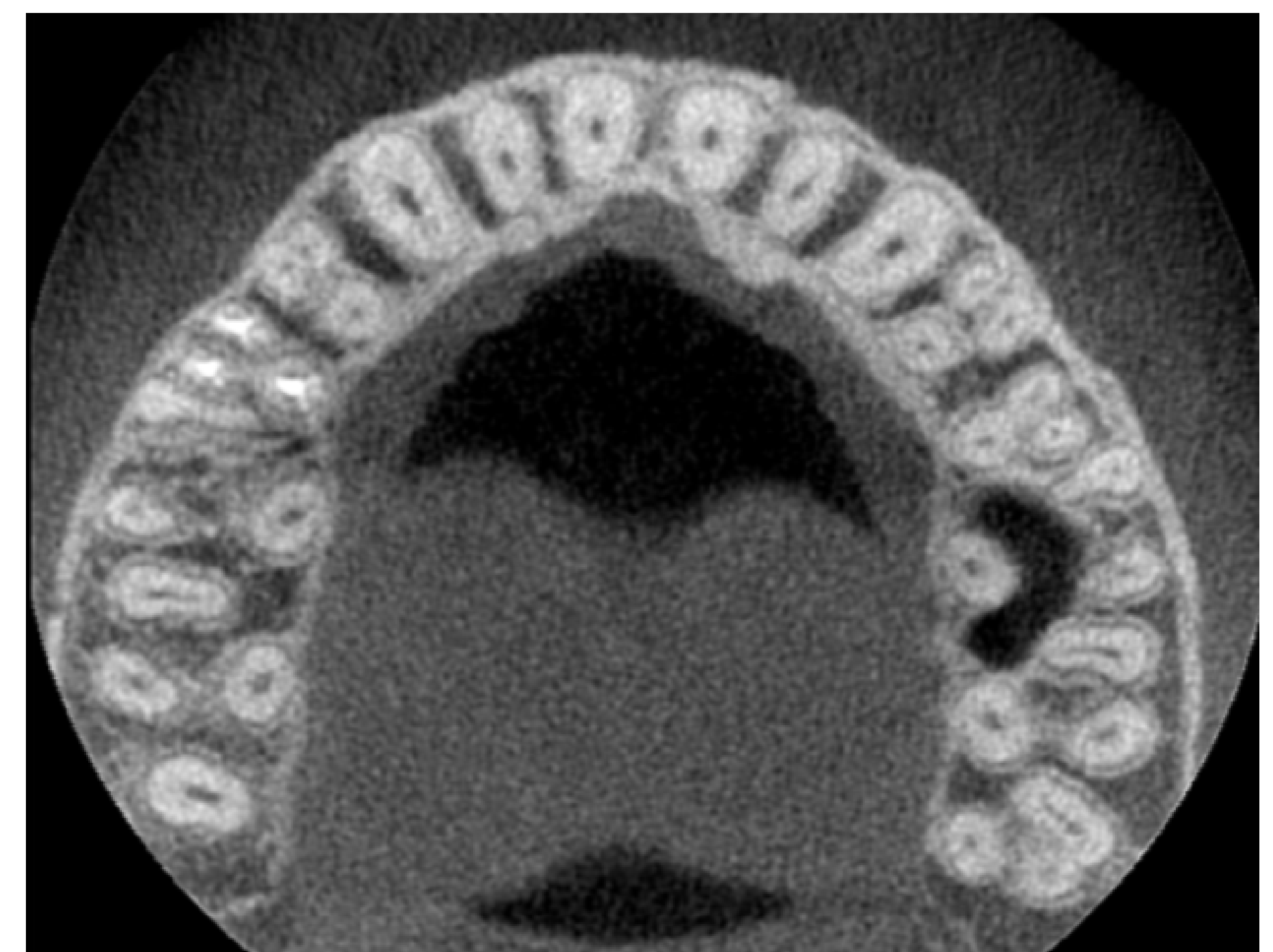
CASE REPORT

A 33-year-old male presented with pain and inflammation in the upper right area; diagnostic tests were performed and the radiograph showed a periapical lesion in tooth number 4 with 3 roots anatomy and external resorption in the distobuccal root. Diagnosis: pulp necrosis and acute apical abscess. At the first appointment surgical drainage, access, cleaning, shaping and medication was performed in the 3 canals. In the second appointment, obturation was performed with lateral condensation technique. At 4 months he presented asymptomatic and with evidence of radiographic healing.



DISCUSSION

Most publications around report a frequency of 0% for the presence of 3 roots in the maxillary second premolar, the remainder not exceeding 1.6%. In Mexico, Esponda (1994) reported 0% in CDMX as did Vega in Yucatán (2015). There are some case reports in South Africa, China and Brazil. Studies conducted in Mexico reported 0%.



CONCLUSION

Cases of maxillary second premolars with 3 roots are very atypical; they are universally considered uniradicular teeth. This case represented a clinical challenge from access to the root canals to obturation, as well as the existing pathologies. We found no previous reports presenting this configuration bilaterally and in the 4 maxillary premolars.

Revista	Autor	Año	n	%	Técnica	Población
OOO	Pineda y Kutler	1972	282	0%	Radiografías	México
JOE	Yang <i>et al.</i>	2014	392	0%	CBCT	China
Archives of Oral Biology	Yi Han <i>et al.</i>	2018	1403	0%	CBCT	China
JOE	Wolf <i>et al.</i>	2020	116	0%	MicroCT	Suiza- alemana
JOE	Kartal <i>et al.</i>	1998	300	0.66%	Diafanización	Turquía
JOE	Bürklein <i>et al.</i>	2017	512	0.4%	CBCT	Alemania
Odontology	Nelakatan <i>et al.</i>	2011	350	1.10%	Diafanización	India
Australian Endod J	Velmurugan <i>et al.</i>	2005	220	1.36%	Radiografías	India
JOE	Abella <i>et al.</i>	2015	374	1.60%	CBCT	España
JOE	Ferreira <i>et al.</i>	2000		Reporte de caso	Radiografías	Brasil
Journal of Dental Sciences	Yeh <i>et al.</i>	2017		Reporte de caso	Radiografías	China
South African Endod J	Bookhan <i>et al.</i>	2019		Reporte de caso	Radiografías	Sudáfrica

REFERENCES

