



Versteckte, enge und stark gekrümmte Kanäle erkennen und behandeln



Prof. Dr. David Sonntag

Versteckte Kanäle

Association between missed canals and apical periodontitis

F. F. N. P. Costa¹, J. Pacheco-Yanes¹, J. F. Siqueira Jr¹, A. C. S. Oliveira¹, I. Gazzaneo¹, C. A. Amorim¹, P. H. B. Santos² & F. R. F. Alves¹ 

¹Faculty of Dentistry, Department of Endodontics, Estácio de Sá University, Rio de Janeiro, Brazil; and ²Private Oral Radiology Clinic, Rio de Janeiro, Brazil

Abstract

Costa FFNP, Pacheco-Yanes J, Siqueira Jr JF, Oliveira ACS, Gazzaneo I, Amorim CA, Santos PHB, Alves FRF. Association between missed canals and apical periodontitis. *International Endodontic Journal*, 52, 400–406, 2019.

Aim To evaluate the frequency of post-treatment apical periodontitis associated with root filled teeth with at least one untreated root canal.

Methodology Eight hundred and seven cone beam computed tomography images containing at least one root filled tooth were selected from a collection of 1543 images from Brazilian individuals. Scans were taken using ICAT Classic devices (Imaging Sciences, Hatfield, PA, USA) in a private oral radiology clinic from January to April 2015. All root filled teeth were analysed for the presence of missed canals and apical periodontitis. The chi-square and odds ratio tests were used to verify if there were an

association and risk relationship between the occurrence of untreated canals and apical periodontitis.

Results A total of 2294 teeth with evidence of root fillings were identified. Two hundred and eighty-one teeth had at least one untreated missed canal (12%). The frequency of apical periodontitis in teeth with at least one untreated canal was significantly greater in comparison to teeth with all canals treated (274/281, 98% versus 1736/2013, 86%) ($P < 0.01$). The odds for apical periodontitis to be present was 6.25 times greater for teeth with an untreated canal. The mesiobuccal roots of maxillary first molars had the greatest frequency of untreated canals (114/154, 74%), with the second mesiobuccal canal being the most frequently missed ($n = 106/114$, 93%).

Conclusion Root filled teeth with at least one missed canal had a high prevalence of post-treatment apical periodontitis.

Keywords: apical periodontitis, cone beam computed tomography, missed root canal.

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12% unbehandelte Kanäle

(281 von 2294 Zähne)

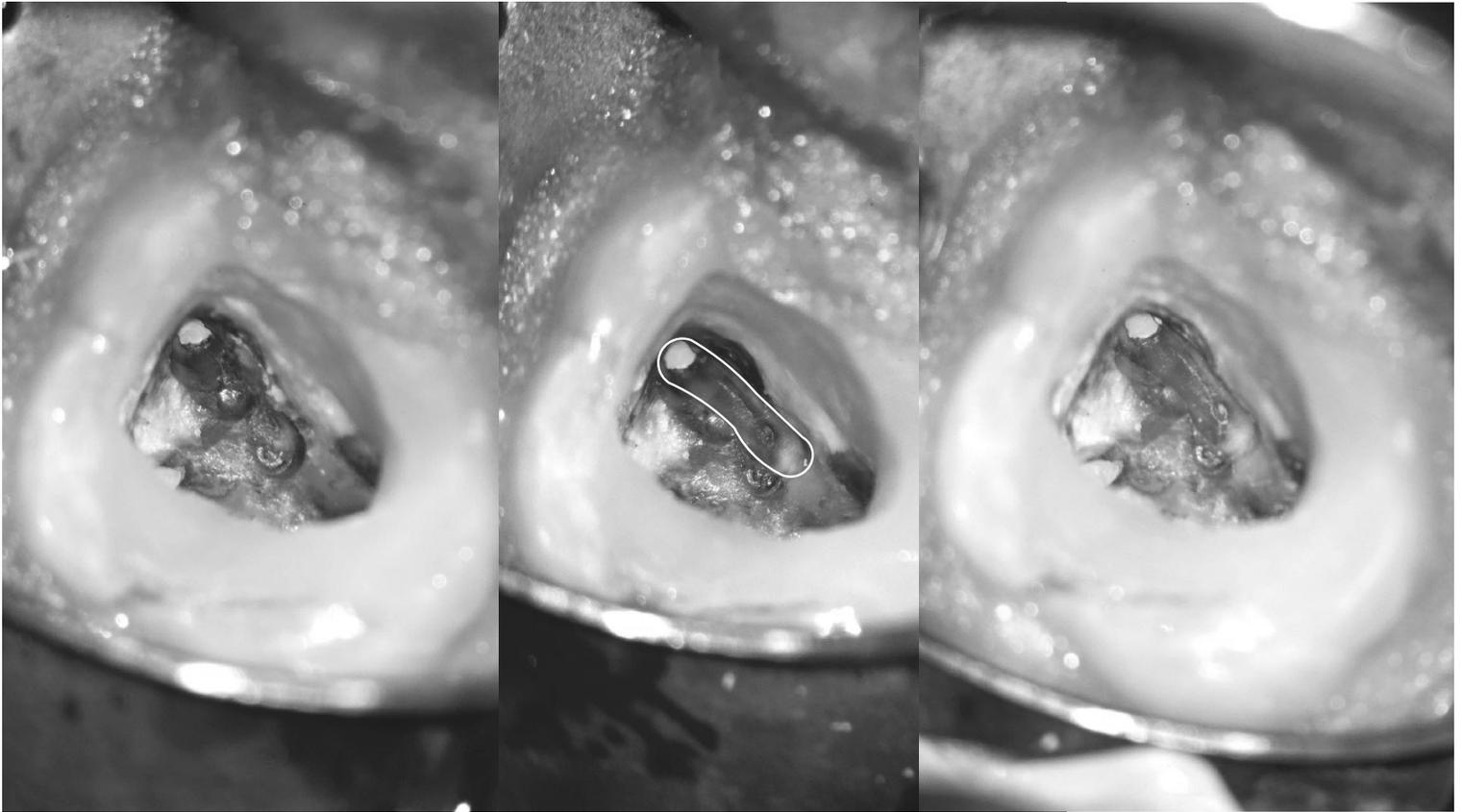
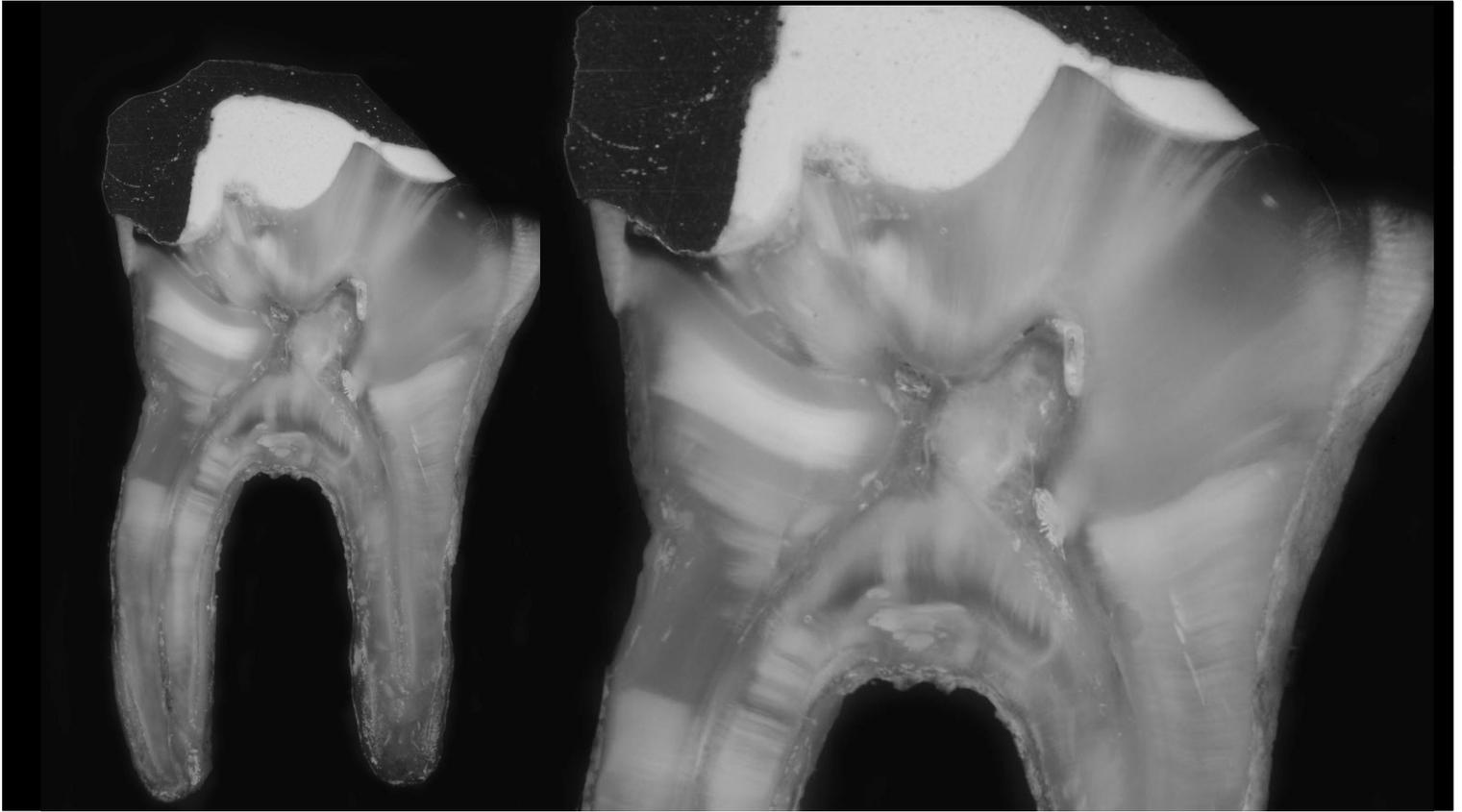
Wahrscheinlichkeit für CAP

6,25x höher

bei nicht aufgefundem Kanal

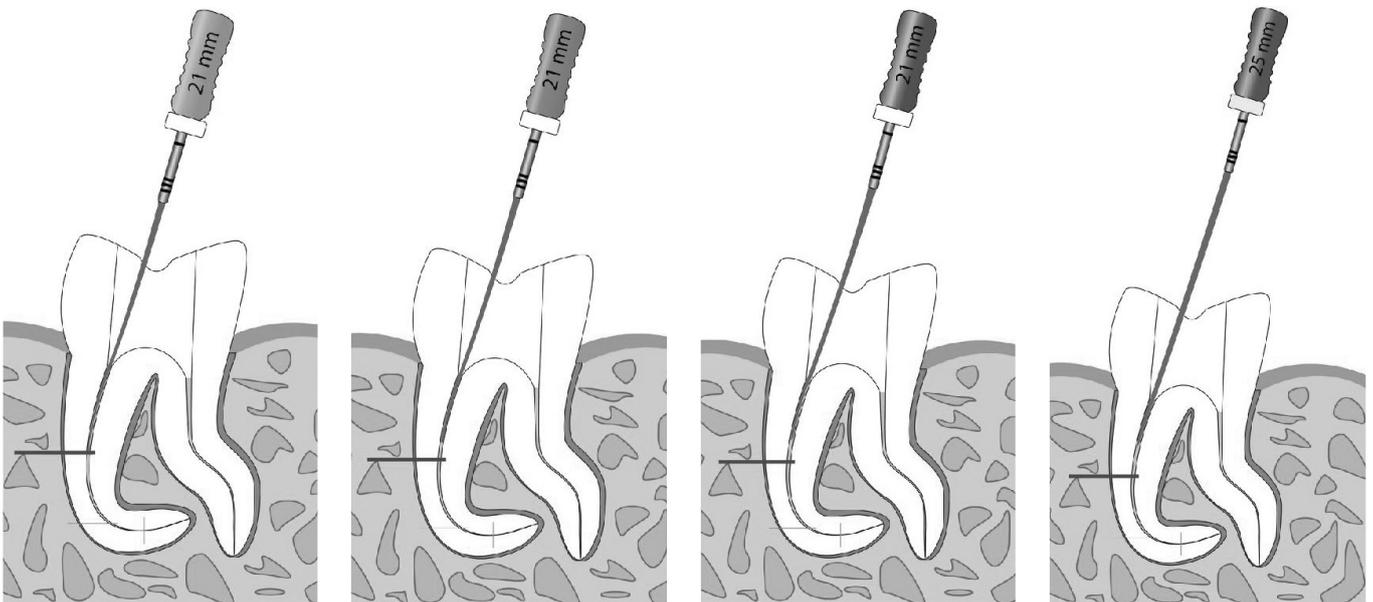


Dr. Holm Reuver, Neustadt an der Weinstrasse

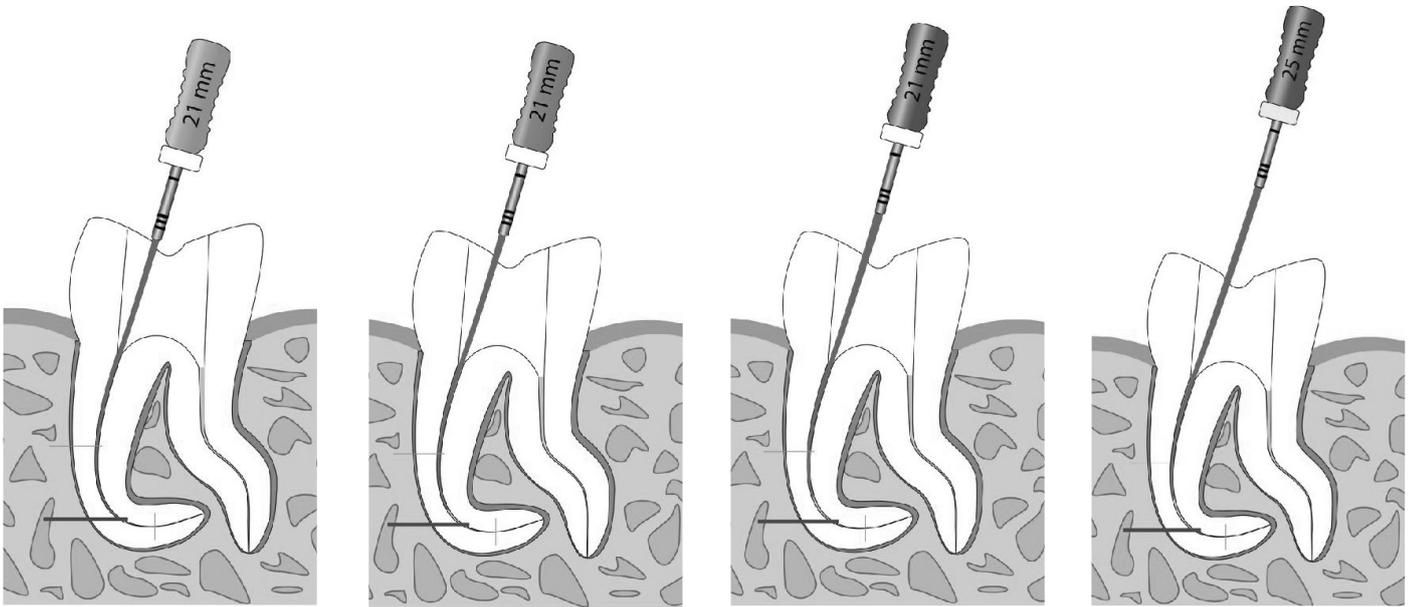


Enge Kanäle

Aufbereitungswelle I



Aufbereitungswelle II



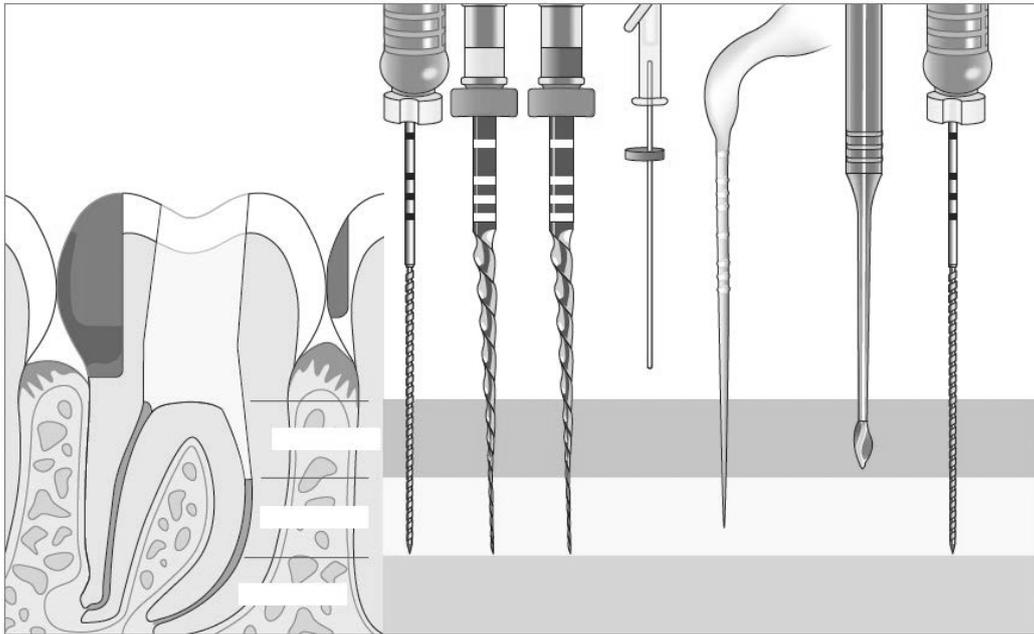
R-Pilot



Stark gekrümmte Kanäle



Dr. Holm Reuver



Fazit

Versteckte Kanäle: Dentin lesen, Dentineinpressung suchen & Geduld

Enge Kanäle: werden in der Regel nach apikal weiter

Stark gekrümmte Kanäle: können jederzeit auftreten!



Herzlichen Dank für Ihre Aufmerksamkeit!