

KERR ENDODONTICS DREAM TOUR

GLIDE PATH - SAGOMATURA - OTTURAZIONE

ROMA - 22/03/2025





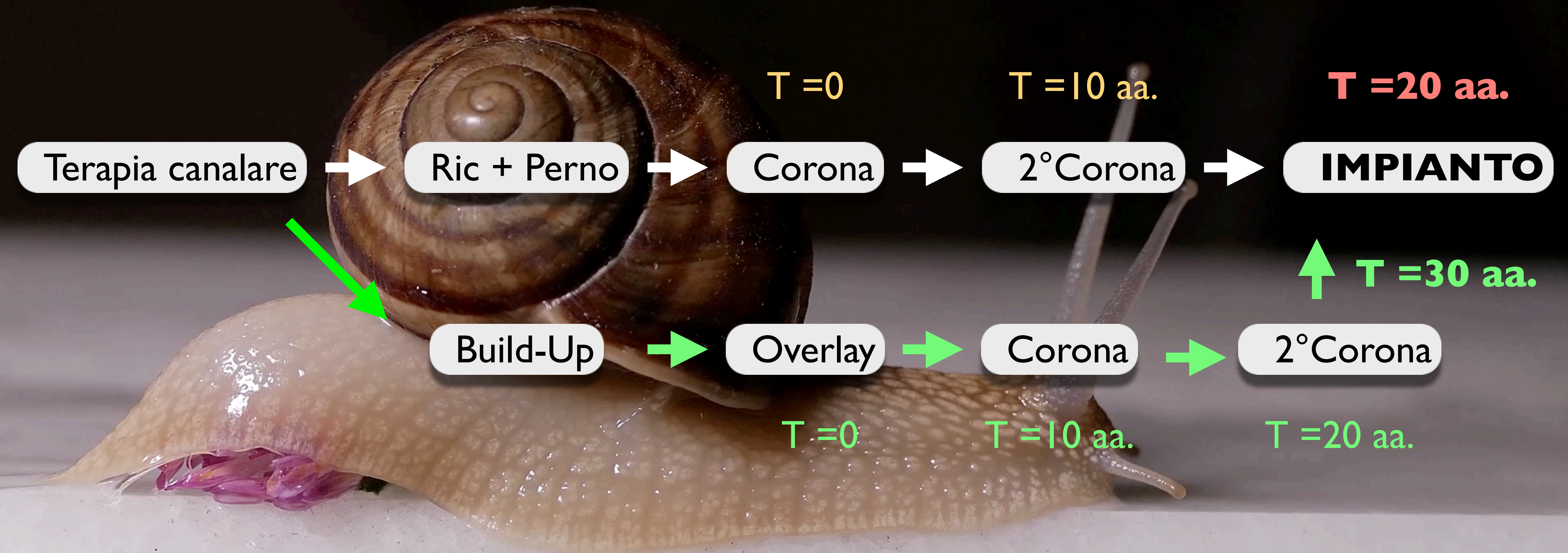


Nuovi obiettivi: **MIE**

Nuovi strumenti canalari

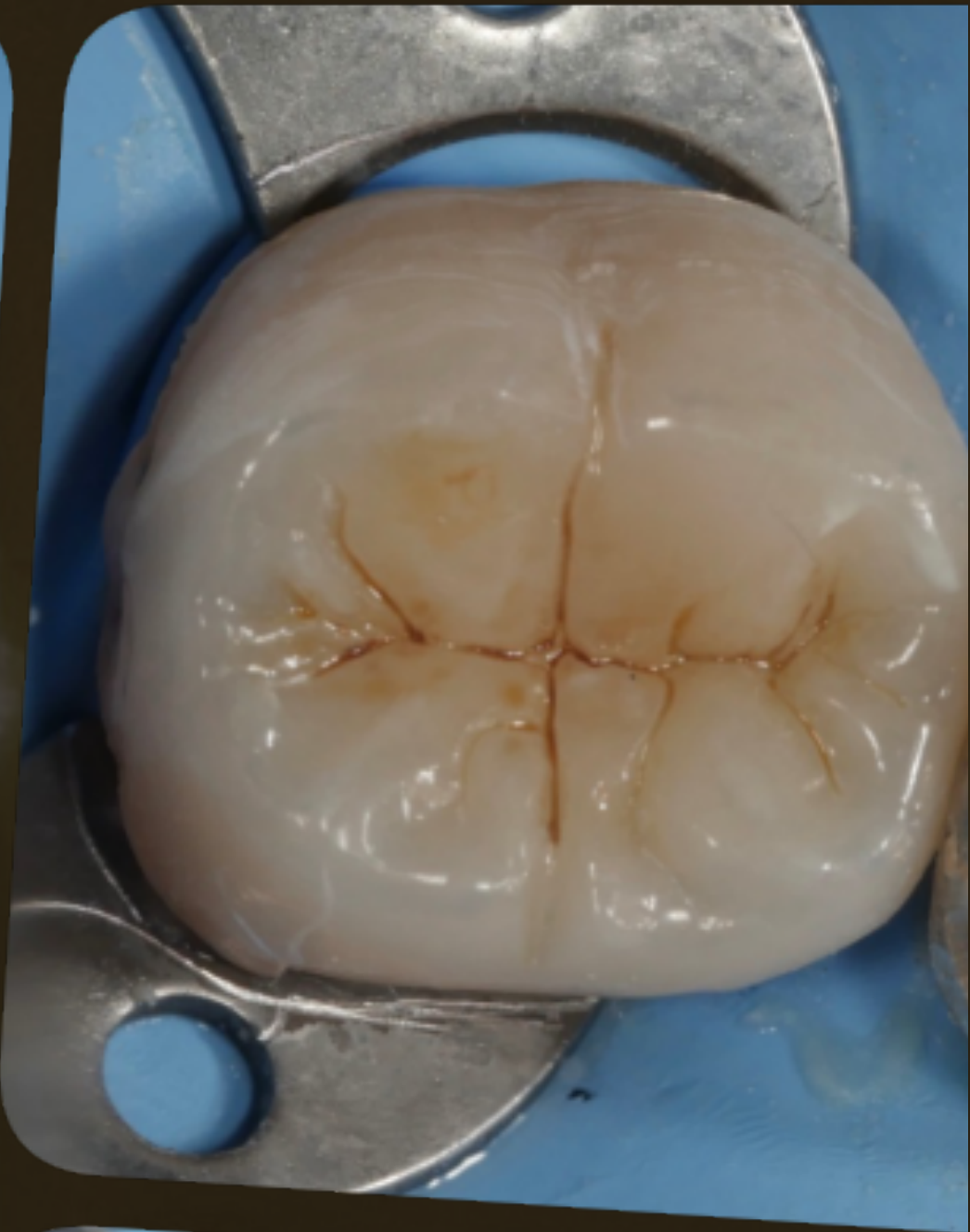
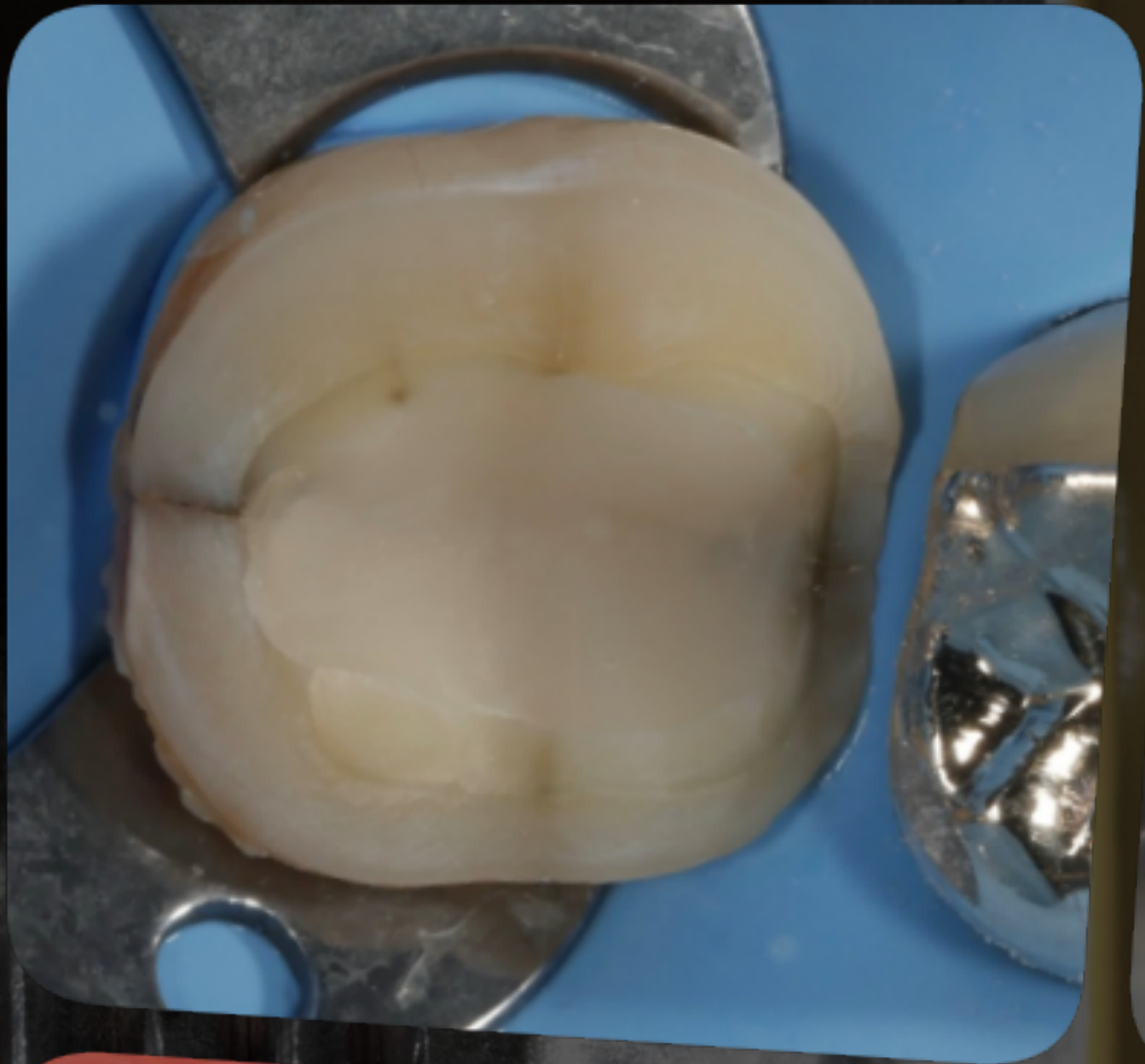
Nuovi sistemi di otturazione

RALLENTARE il ciclo dei reinterventi













4 AA.



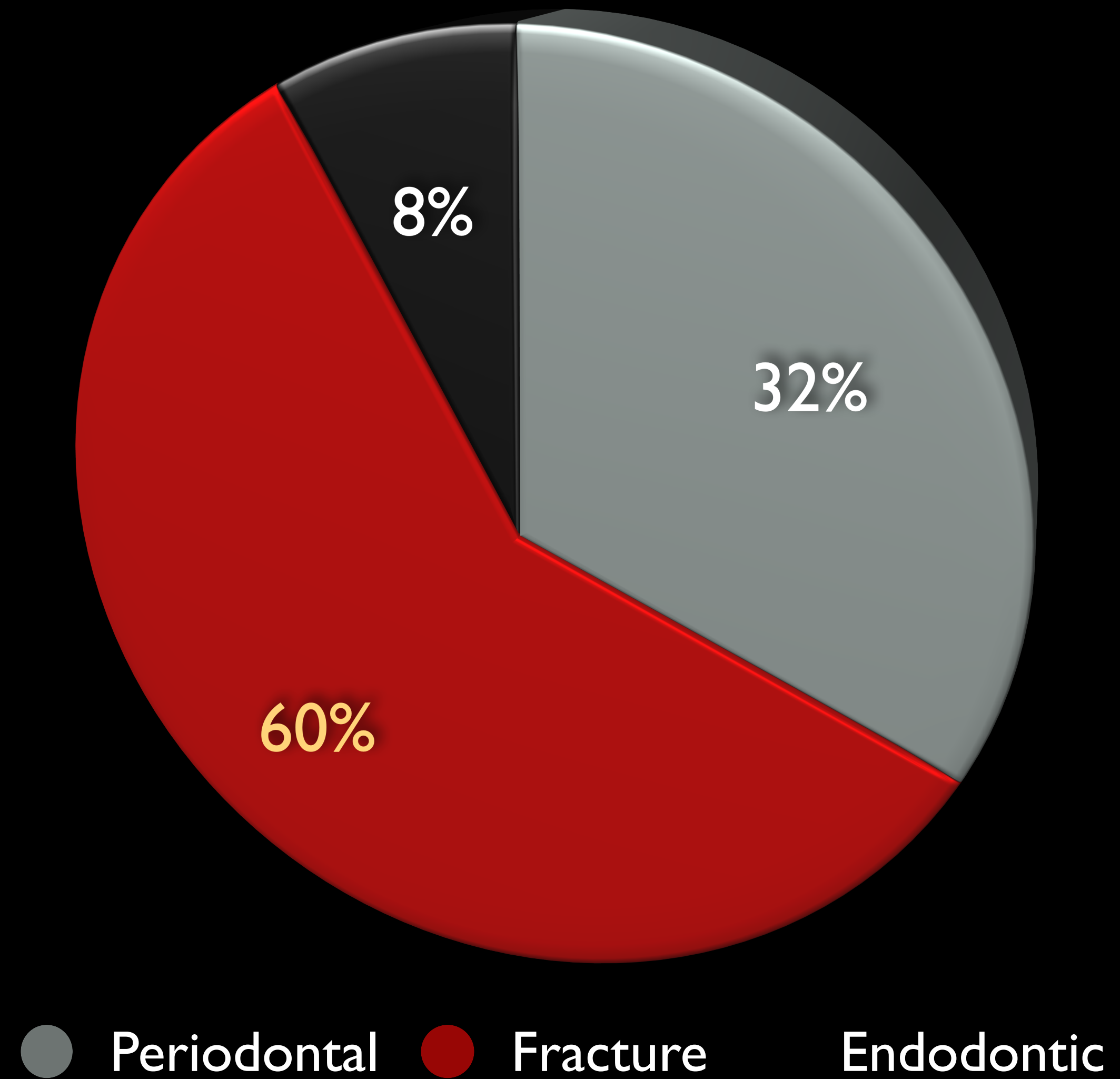
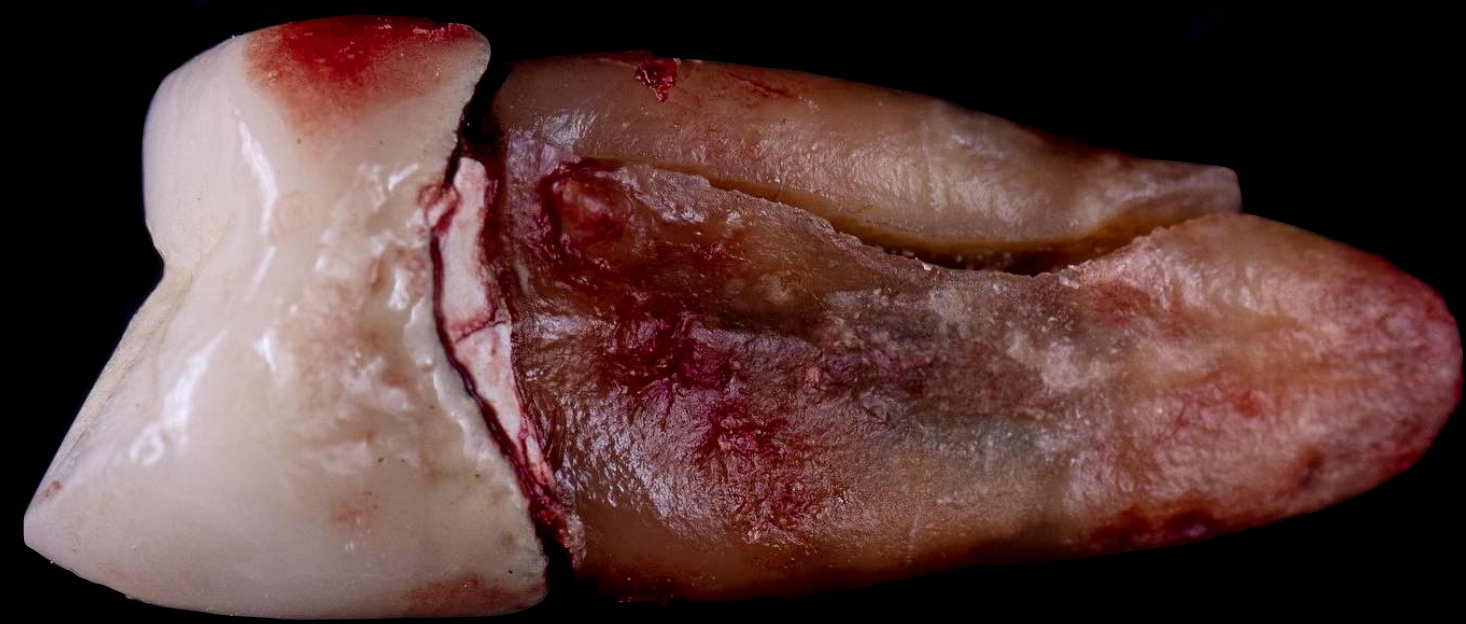
Nasseh, 2014:
Minimal removal of dentin
during 3 steps of RCT

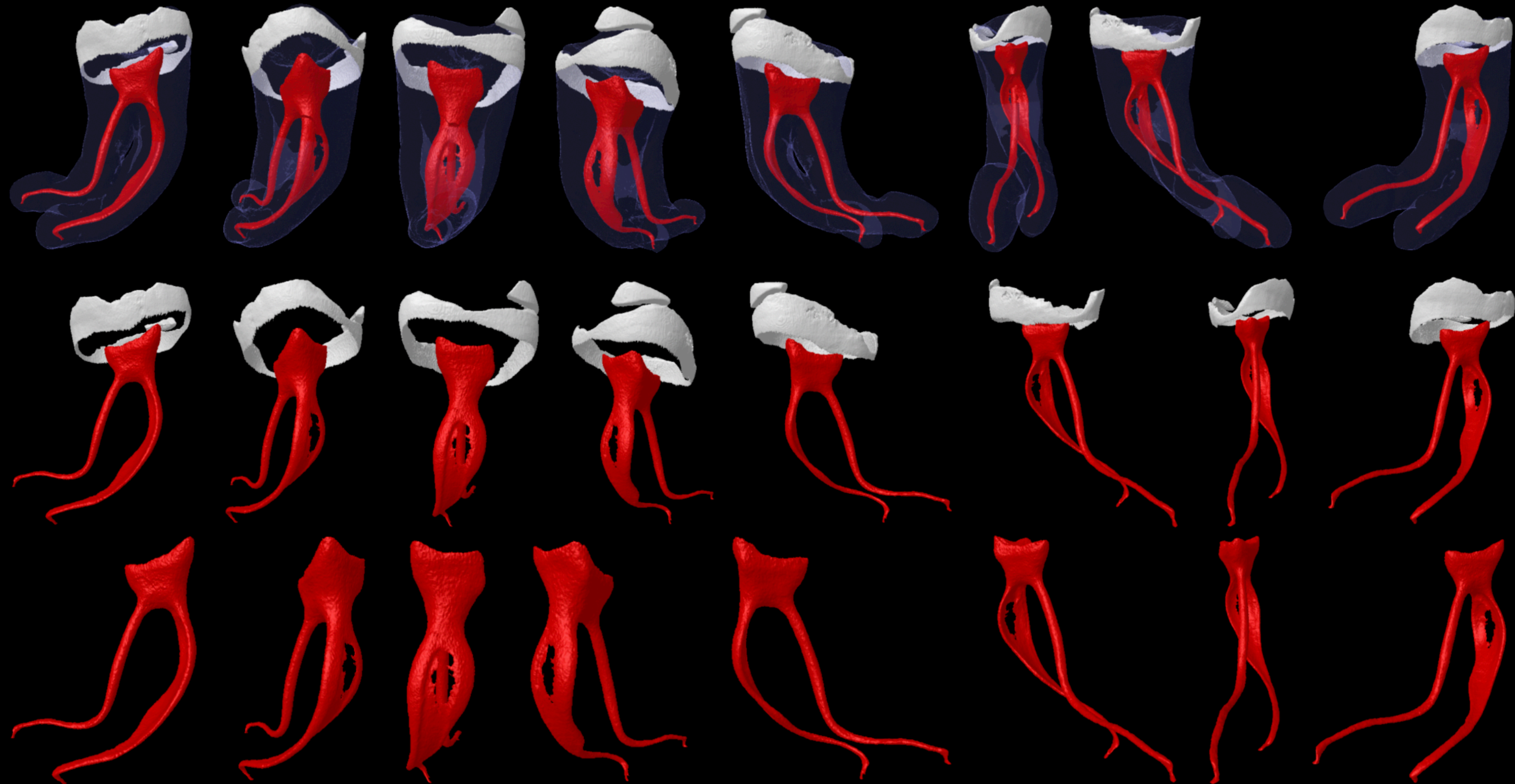
- Apertura camerale
- Preparazione apicale
- Sagomatura di raccordo



FVR = PRESERVARE LA DENTINA PERICERVICALE

Vire 1991 - "Failure of endodontically treated teeth: classification and evaluation"





“Everything has changed, except the **anatomy**” (Buchanan, 2018)

Limiti degli strumenti rotanti



Resistenza alla fatica ciclica ...

Inversamente proporzionale al quadrato del diametro



J Endod. 2002 Mar;28(3):211-6.

Roentgenographic investigation of frequency and degree of canal curvatures in human permanent teeth.

Schäfer E¹, Diez C, Hoppe W, Tepel J.

Author information

Abstract

Canal curvatures of 700 permanent human teeth were determined by measuring the angle and the radius of the curvatures and the length of the curved part of the canal. For each type of tooth (except third molars) 50 were selected at random and were investigated. Size 08 silver points were inserted into the canals, and the teeth were radiographed from a facial and proximal view by using a standardized technique. All radiographs were analyzed by a computerized digital image processing system. Of the 1163 root canals examined, 980 (84%) were curved and 65% showed an angle ≤ 27 degrees with radii < 40 mm. Thirteen percent displayed angles between 27 degrees and 35 degrees with radii not greater than 15 mm, and 9% of all canals that were investigated had curves > 35 degrees with the greatest radius of 13 mm. The greatest angle of all the teeth was 75 degrees with a radius of 2 mm. To define the canal curvature mathematically and unambiguously, the angle, the radius, and the length of the curve should be given.

1163 radici esaminate:
980 (84%) curve

78% angolo $< 27^\circ$
13% angolo $27-35^\circ$
9% angolo $> 35^\circ$



... e ritorno elastico

This deflection (...), and the elastic memory of the deflected metal, produces greater cutting efficiency in the direction **opposite** to the curvature of the instrument”

Schilder, H. “Cleaning and shaping the root canal” - Dent Clin North Am. 1974 Apr; 18 (2): 269-96



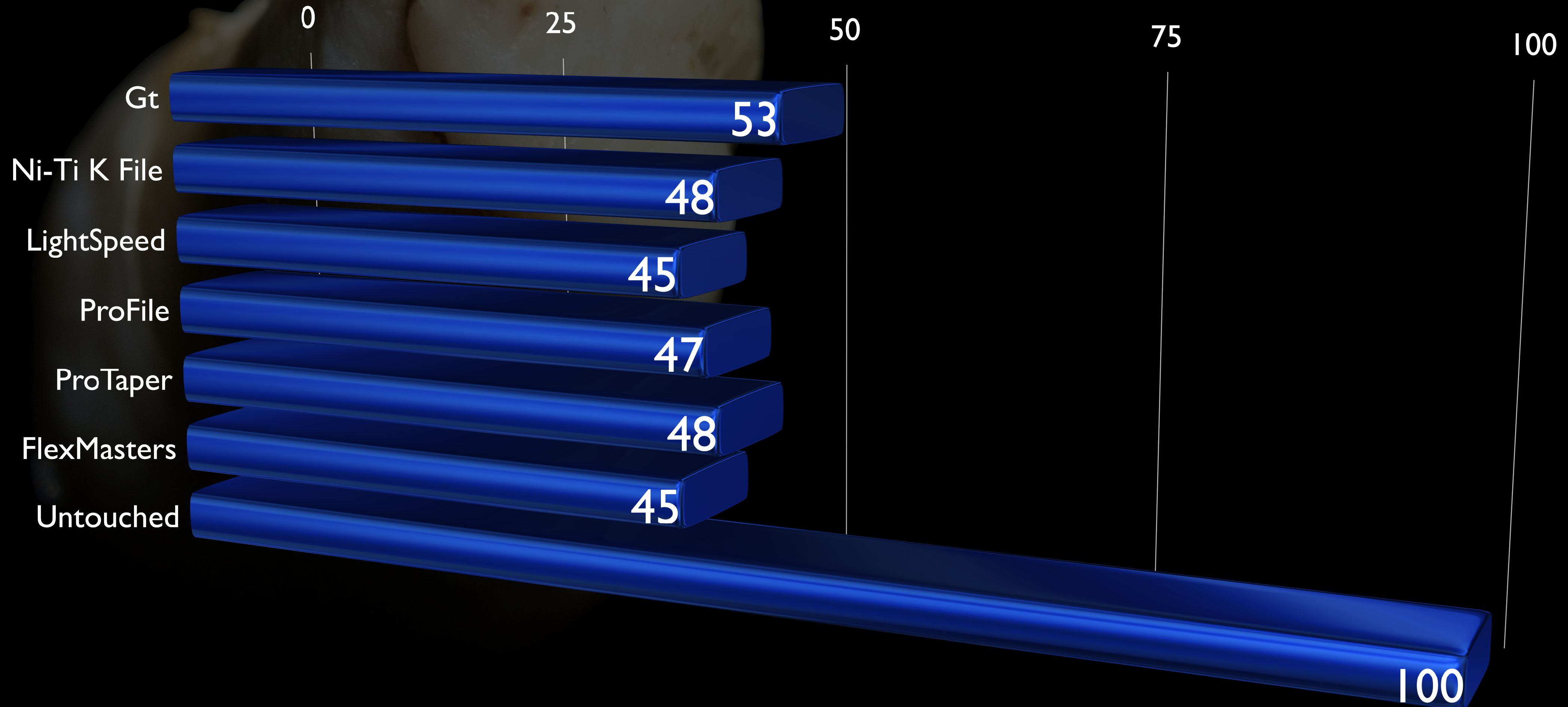
Minimal Apical Enlargement for Penetration of Irrigants to the Apical Third of Root Canal System: A Scanning Electron Microscope Study

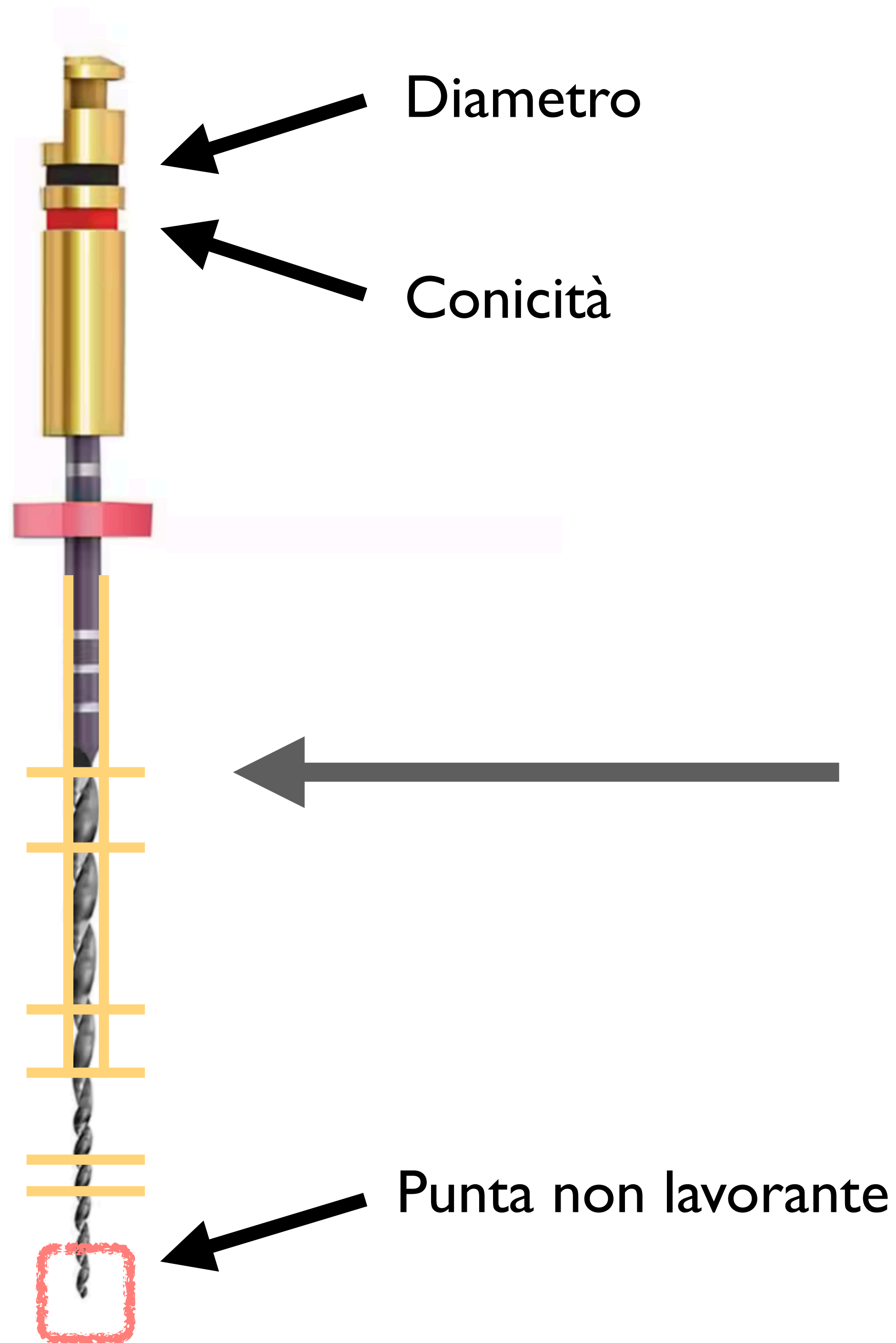
P Srikanth¹, Amaravadi Gopi Krishna², Siva Srinivas³, E Sujayeendranatha Reddy⁴, Someshwar Battu⁵, Swathi Aravelli¹

Minimal apical enlargement for penetration of irrigants to apical third is #30...

... NO MATTER THE TAPER

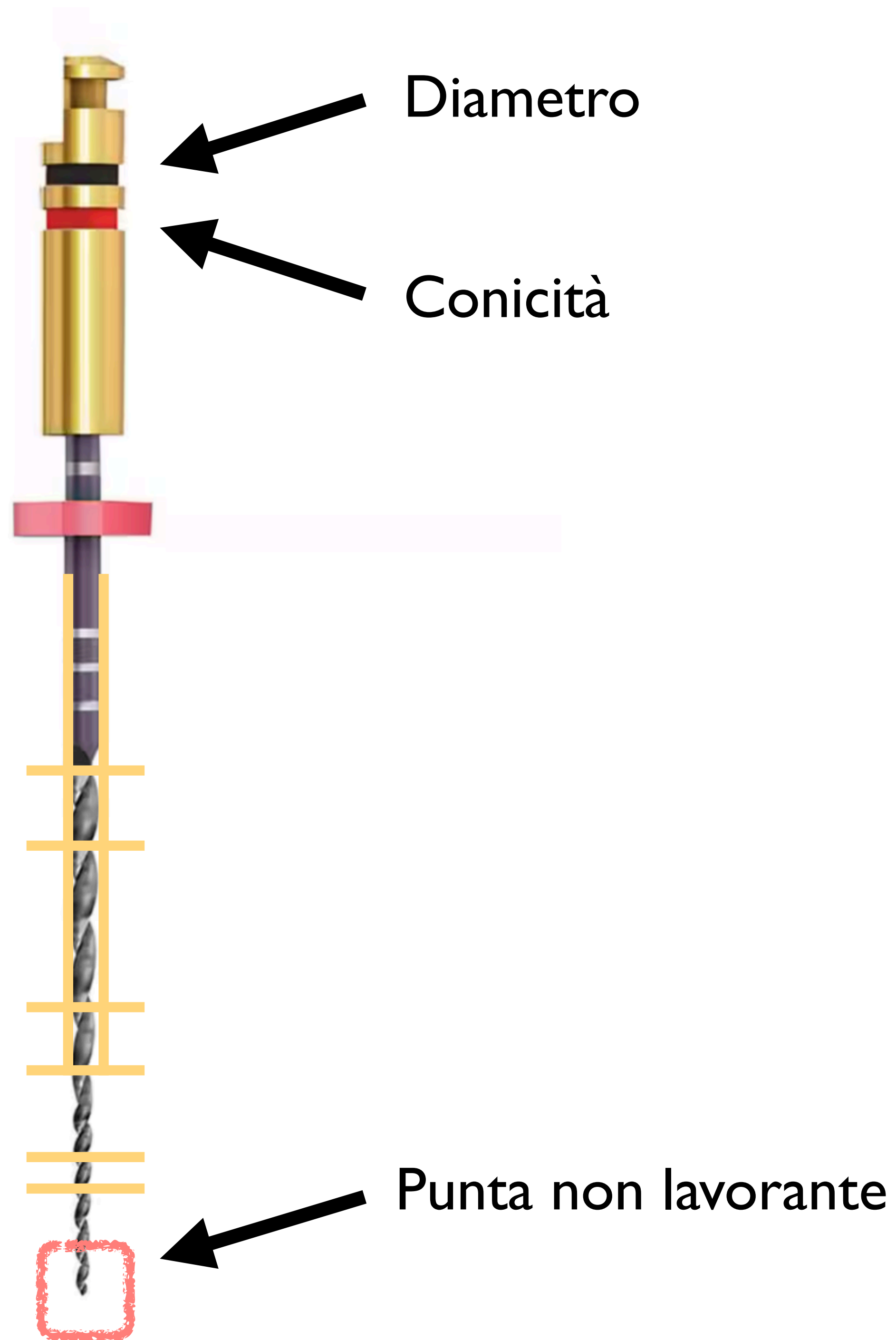
Paqu  et AI 2009





Diametro max 1mm

Punta non lavorante

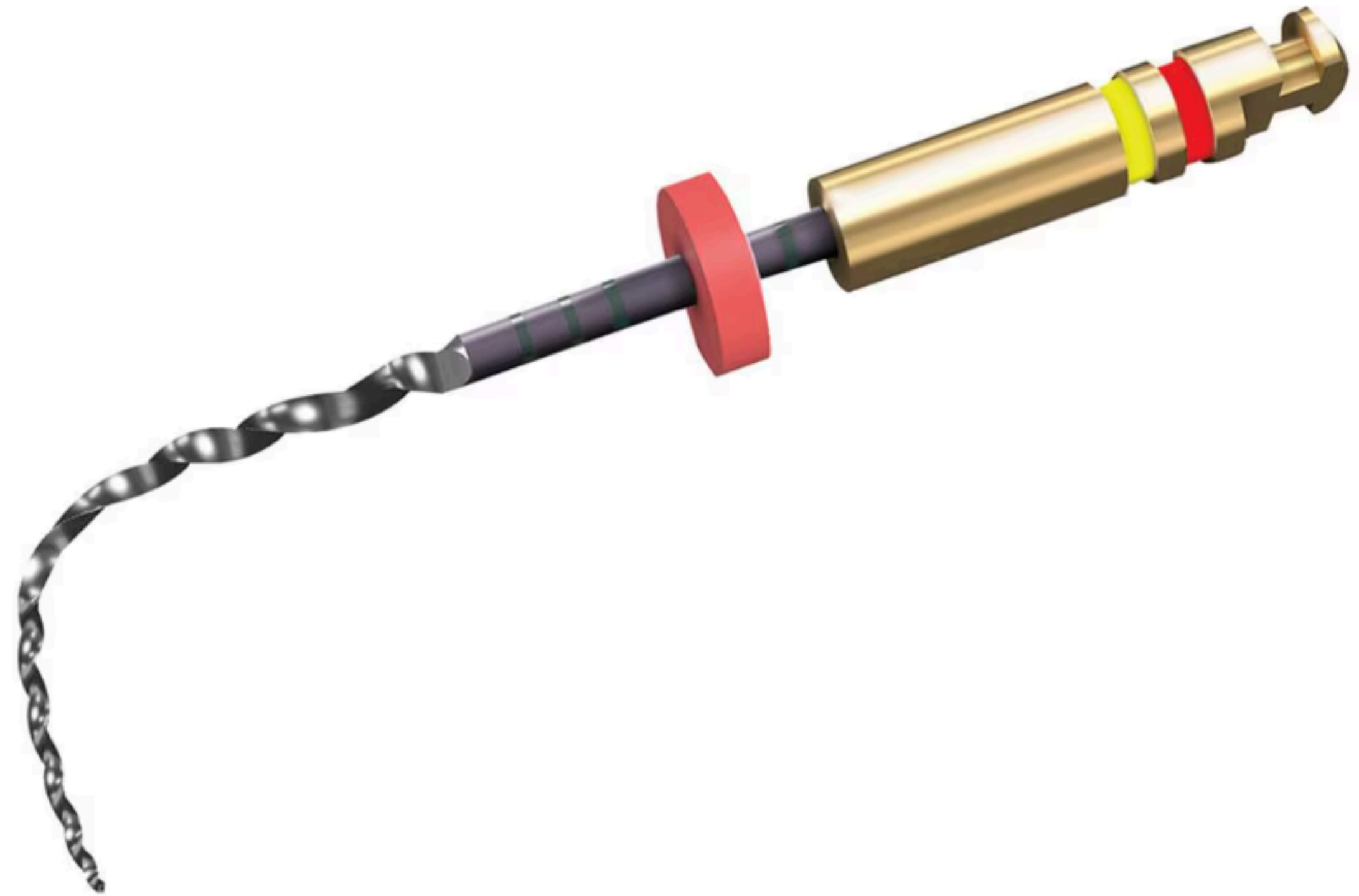


	40 06	25 06	30 04
D16	136	121	94
D15	130	115	90
D14	124	109	86
D13	118	103	82
D12	112	97	78
D11	106	91	74
D10	100	85	70
D09	94	79	66
D08	88	73	62
D07	82	67	58
D06	76	61	54
D05	70	55	50
D04	64	49	46
D03	58	43	42
D02	52	37	38
D01	46	31	34
D00	40	25	30

● ZenFlex ● ProTaper Gold



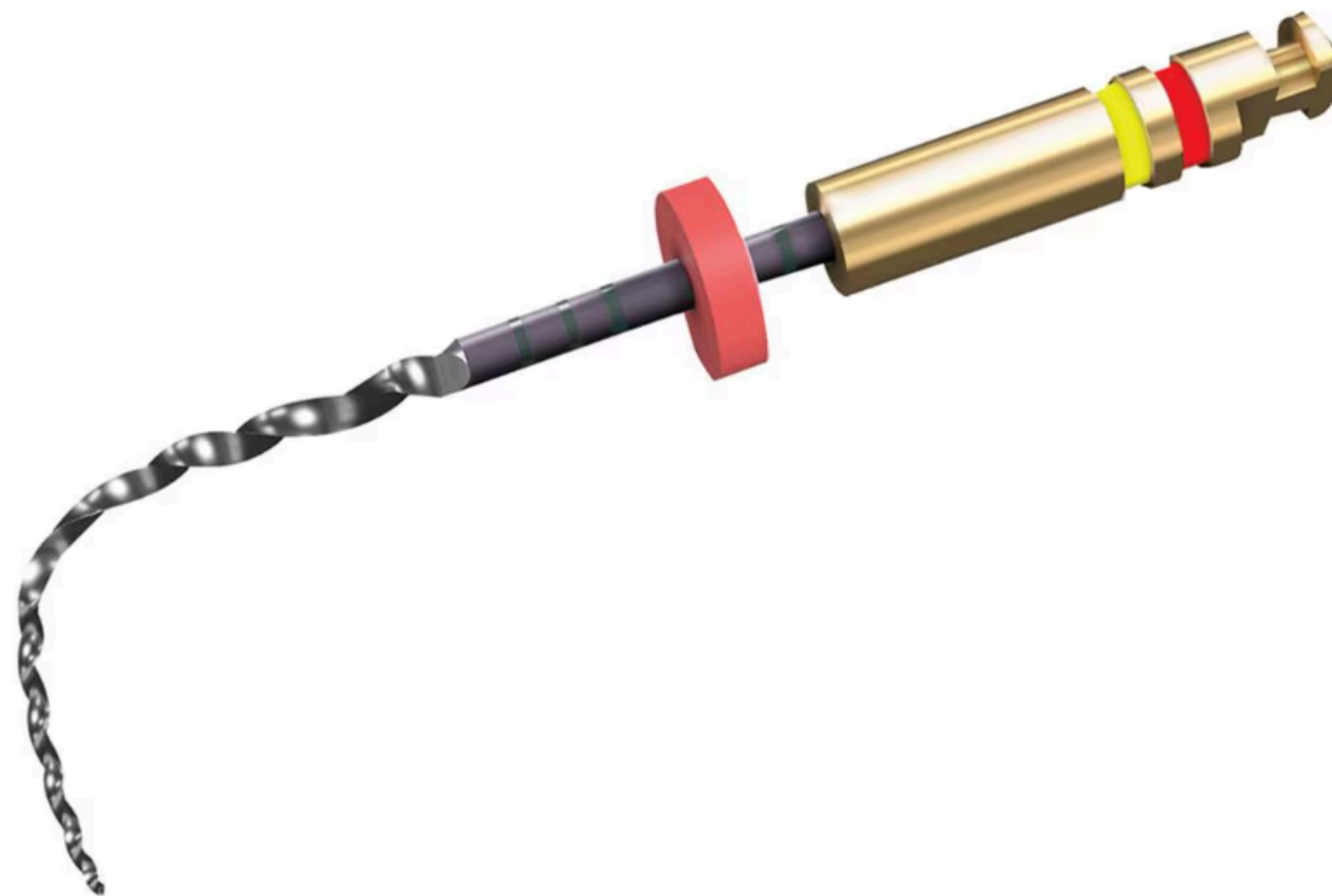
Sezione TRIANGOLARE



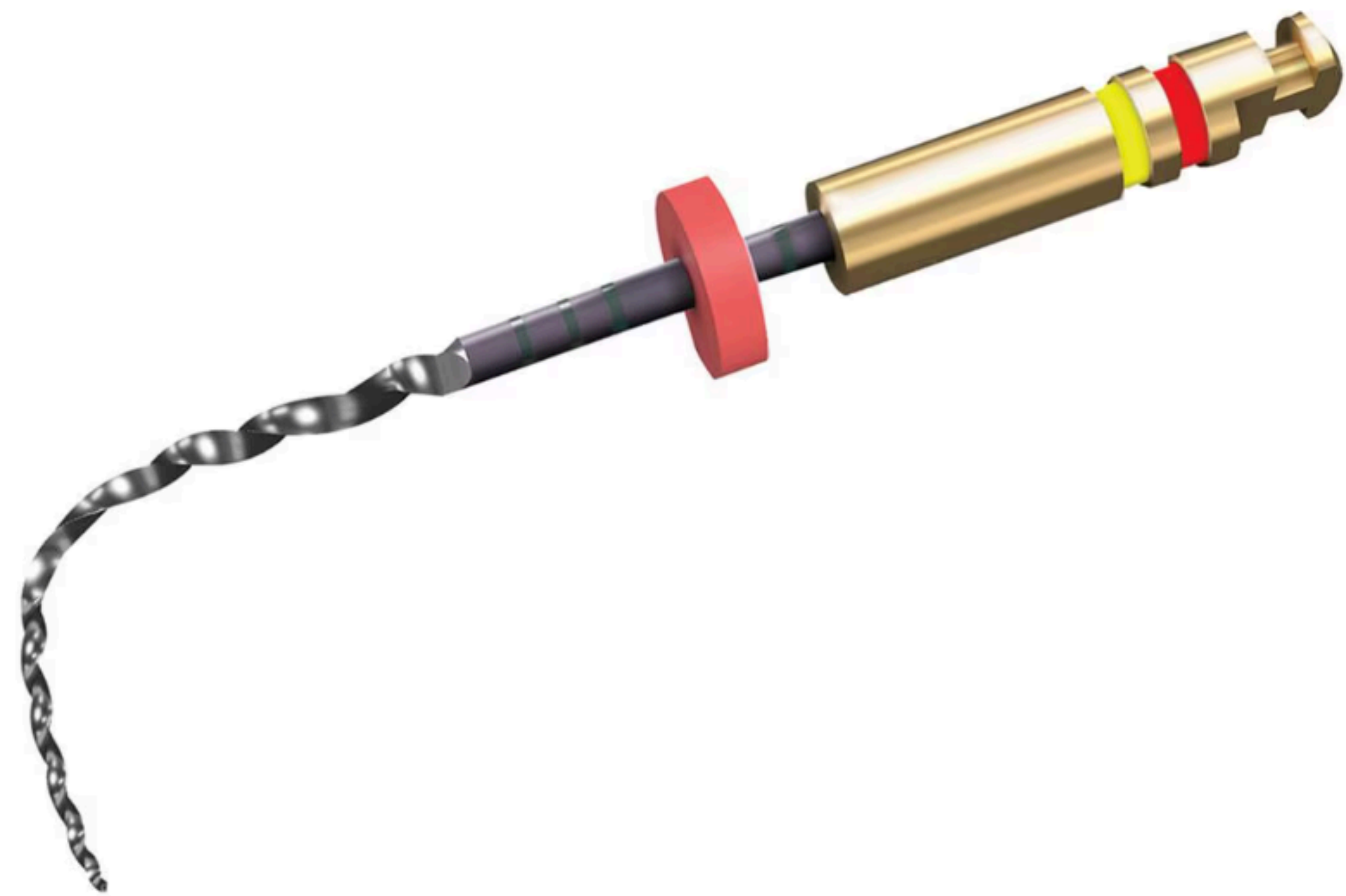
● ZenFlex ● ProTaper Gold



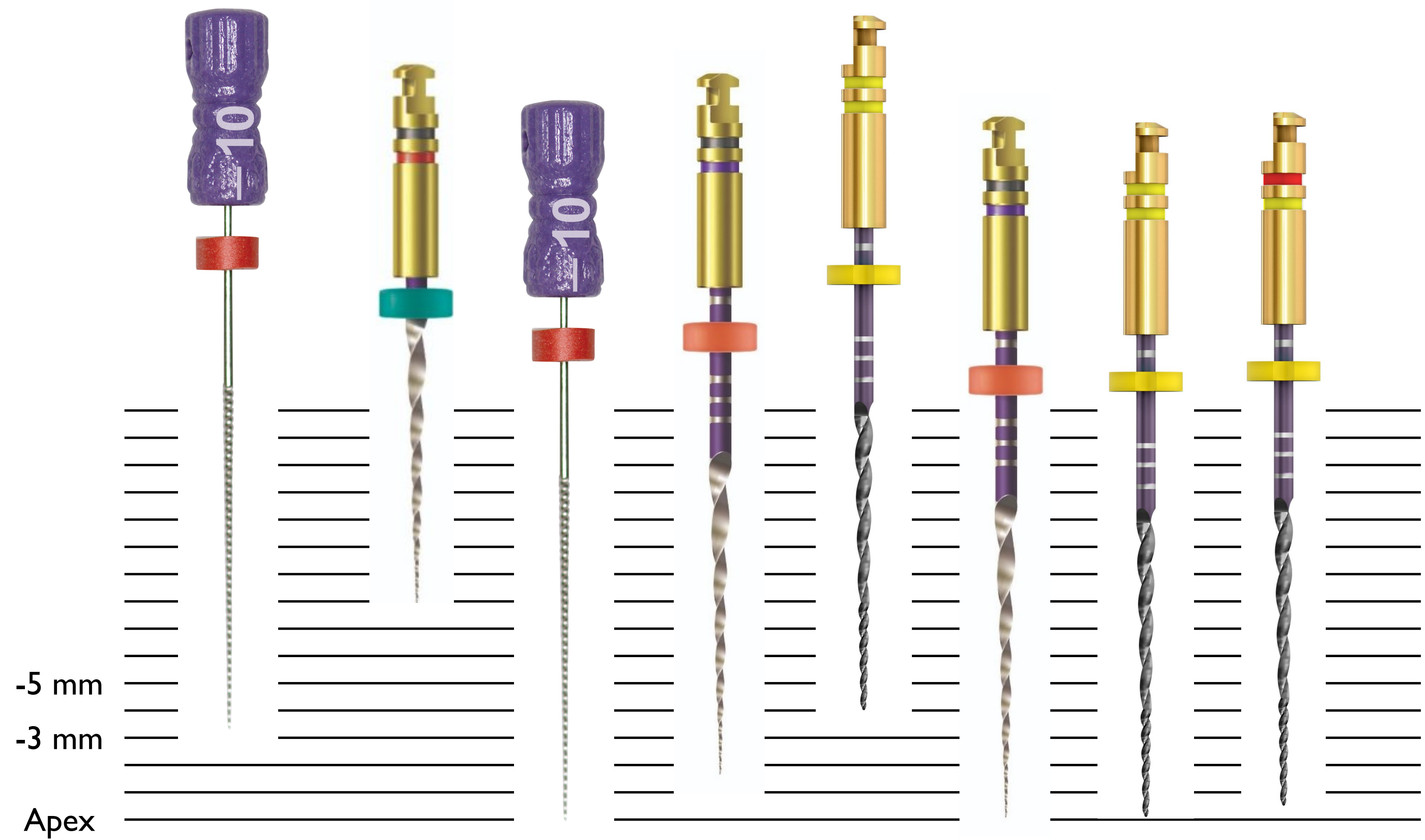
> TAGLIO
> FLESSIBILITA'



Conicità	Punta	21mm	25mm
.04	.20	818-1206	818-1207
.04	.25	818-1256	818-1257
.04	.30	818-1306	818-1307
.04	.35	818-1356	818-1357
.04	.40	818-1406	818-1407
.04	.45	818-1456	818-1457
.04	.50	818-1506	818-1507
.04	.55	818-1556	818-1557
.06	.20	818-2206	818-2207
.06	.25	818-2256	818-2257
.06	.30	818-2306	818-2307
.06	.35	818-2356	818-2357
.06	.40	818-2406	818-2407
.06	.45	818-2456	818-2457
.06	.50	818-2506	818-2507
.06	.55	818-2556	818-2557



Conicità	Punta	21mm	25mm
.04	.20	818-1206	818-1207
.04	.25	818-1256	818-1257
.04	.30	818-1306	818-1307
.04	.35	818-1356	818-1357
.04	.40	818-1406	818-1407
.04	.45	818-1456	818-1457
.04	.50	818-1506	818-1507
.04	.55	818-1556	818-1557
.06	.20	818-2206	818-2207
.06	.25	818-2256	818-2257
.06	.30	818-2306	818-2307
.06	.35	818-2356	818-2357
.06	.40	818-2406	818-2407
.06	.45	818-2456	818-2457
.06	.50	818-2506	818-2507
.06	.55	818-2556	818-2557



Sequenza 04

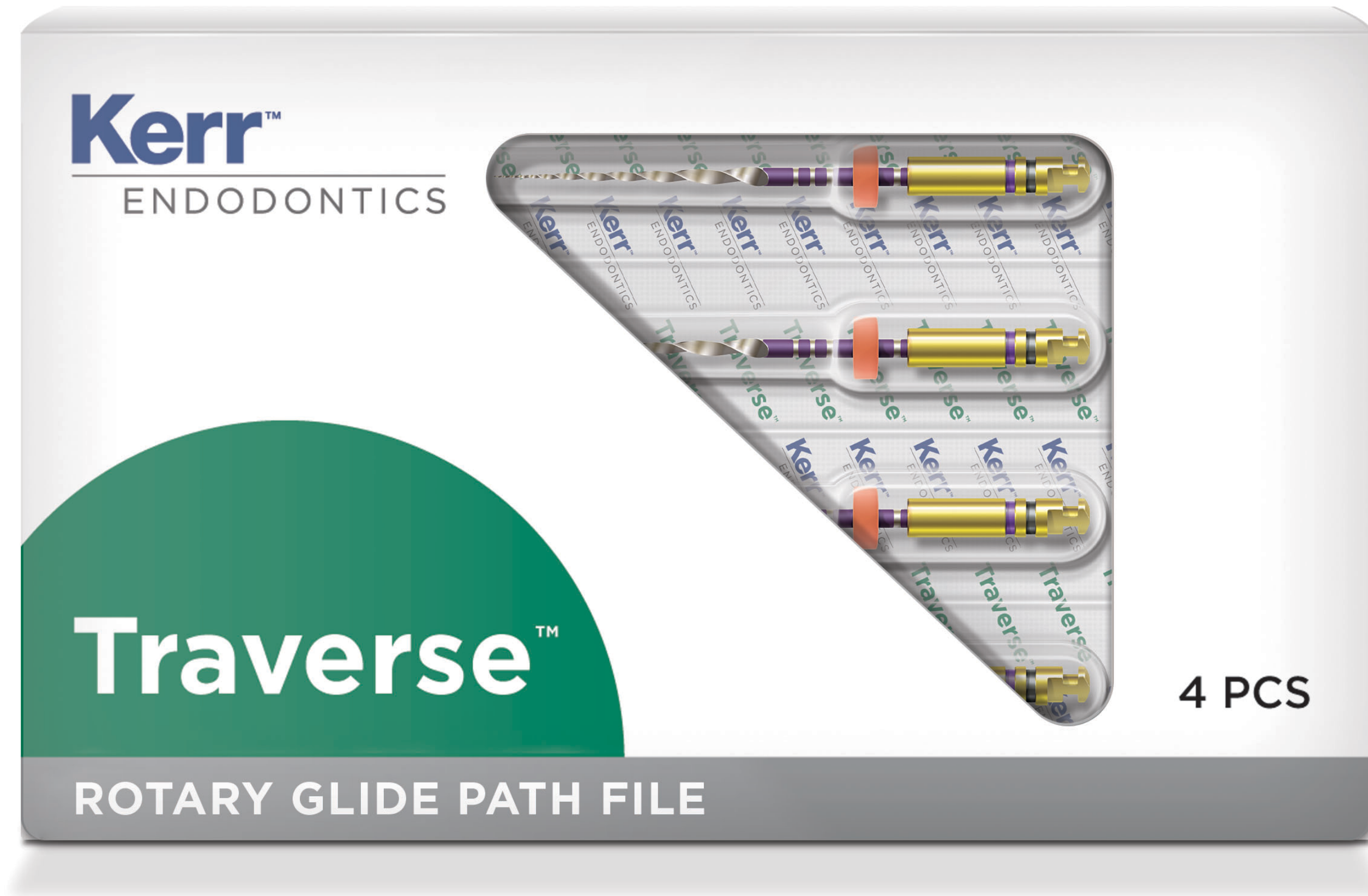
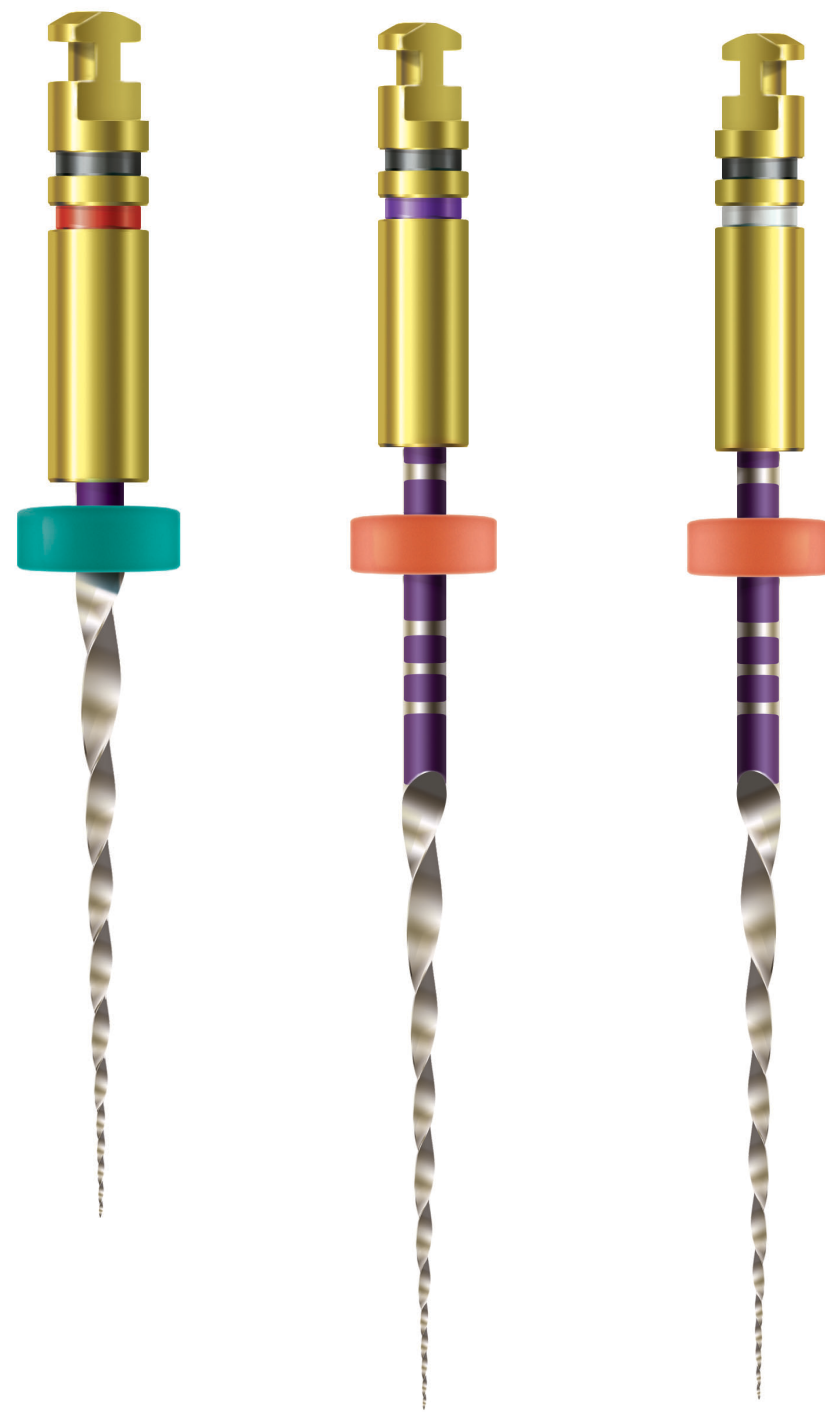
Conicità	Punta	21mm	25mm
.04	.20	818-1206	818-1207
.04	.25	818-1256	818-1257
.04	.30	818-1306	818-1307
.04	.35	818-1356	818-1357
.04	.40	818-1406	818-1407
.04	.45	818-1456	818-1457
.04	.50	818-1506	818-1507
.04	.55	818-1556	818-1557
.06	.20	818-2206	818-2207
.06	.25	818-2256	818-2257
.06	.30	818-2306	818-2307
.06	.35	818-2356	818-2357
.06	.40	818-2406	818-2407
.06	.45	818-2456	818-2457
.06	.50	818-2506	818-2507
.06	.55	818-2556	818-2557



Sequenza 06

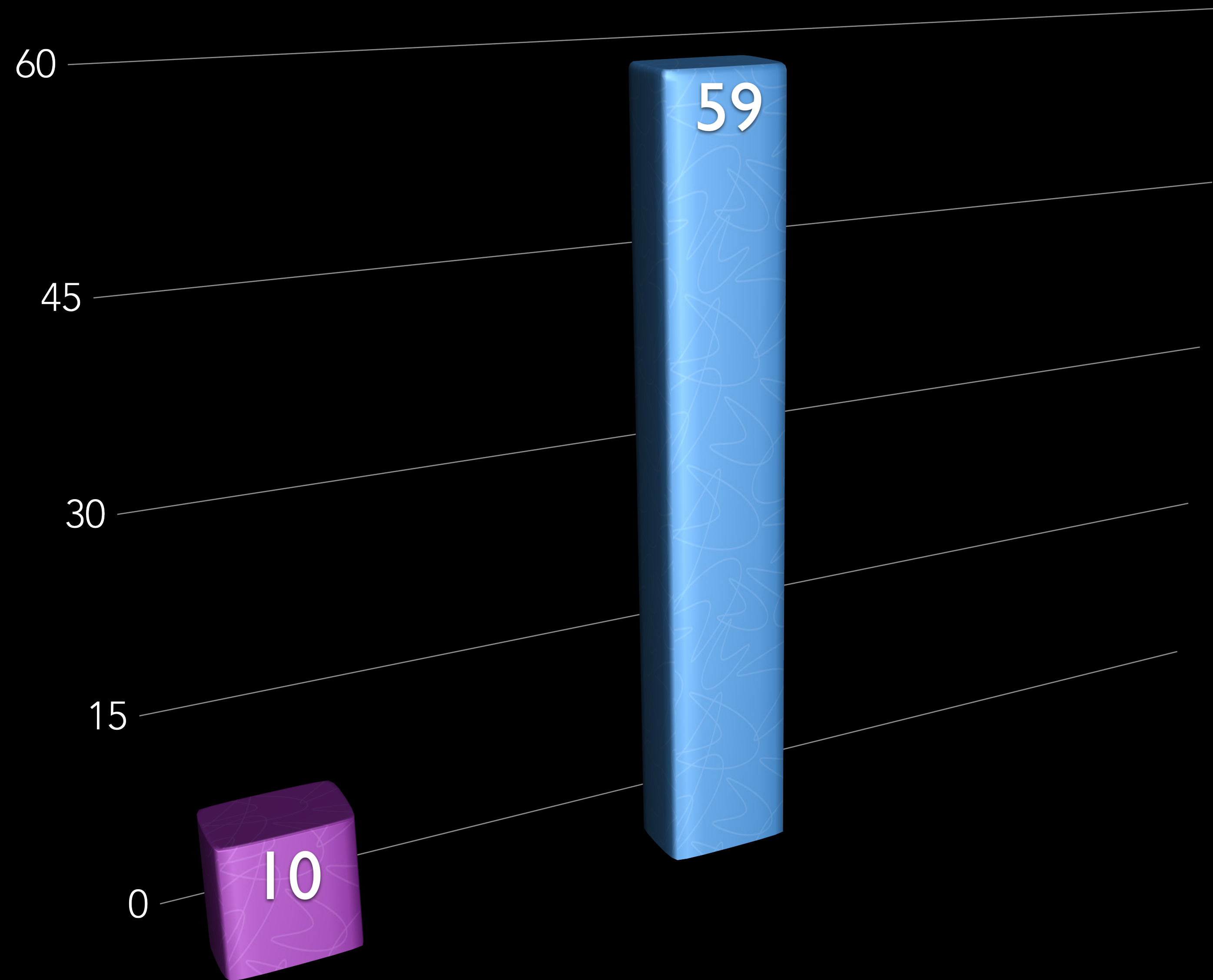
Strumenti Rotanti per Glide Path

Traverse



 NO Glide Path

 Glide Path



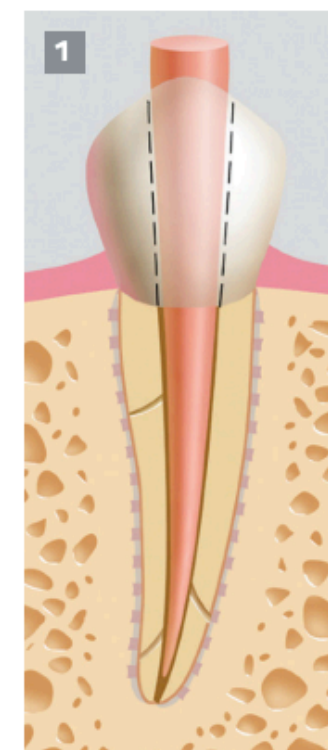




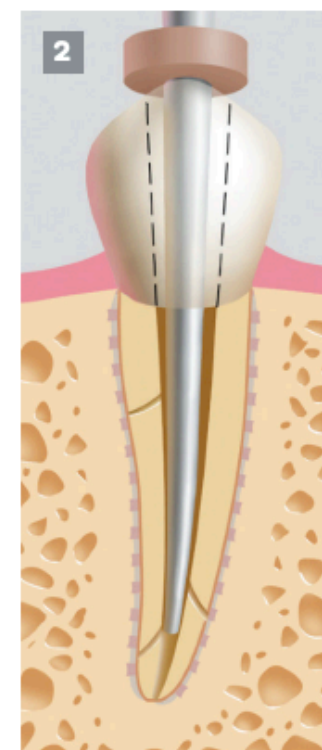
Continuous Wave of Condensation Technique™

Developed by Dr. L. Stephen Buchanan

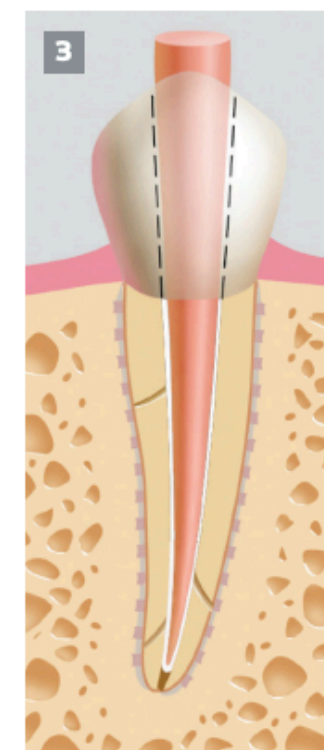
Technique Card



Fit the master cone (in a wet canal) to full length. Grab it at a right angle to the reference point with cotton pliers and trim the tip to be .5mm's short of full working length.



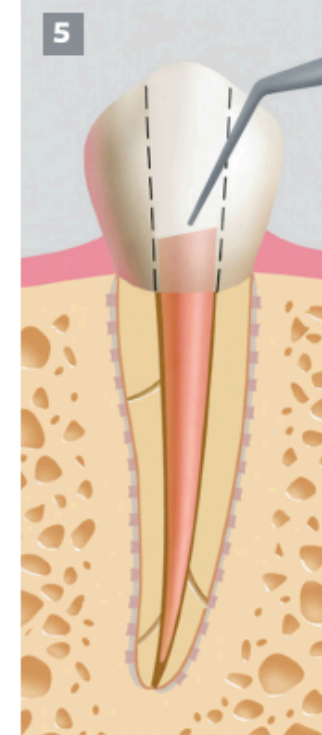
Pre-fit a Buchanan Heat Plugger in the canal and adjust the rubber stop to the reference point. Compare the fit plugger to the fit cone to determine the depth of the plugger in the canal – ideal is 4–6mm from the terminus.



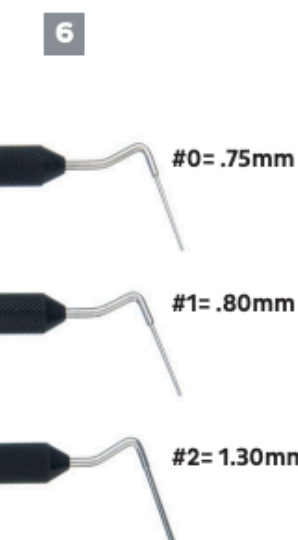
Coat the apical 1/3 of the cone with sealer and slowly place it to length in the canal pumping it up and down 2–3 times.



The Downpack device can be used with both gutta percha.



Sear the cone off at the orifice level.

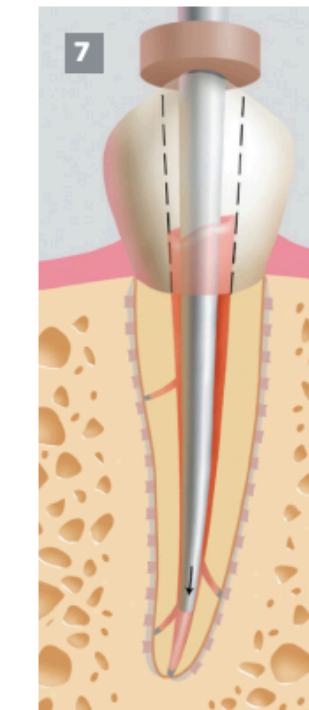


Select the appropriate size Buchanan Hand Plugger, and using the stainless steel end, firmly condense the gutta percha at the orifice.

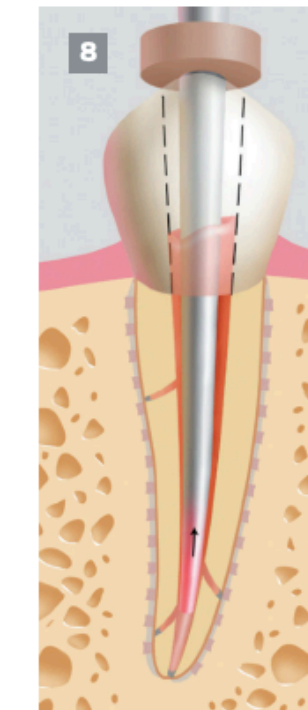
Illustrations courtesy of Dr. Gary Glassman.

7 – 14

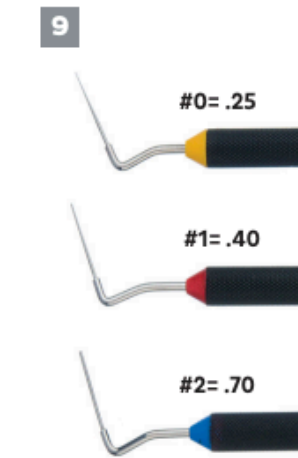
Continuous Wave of Condensation Technique™



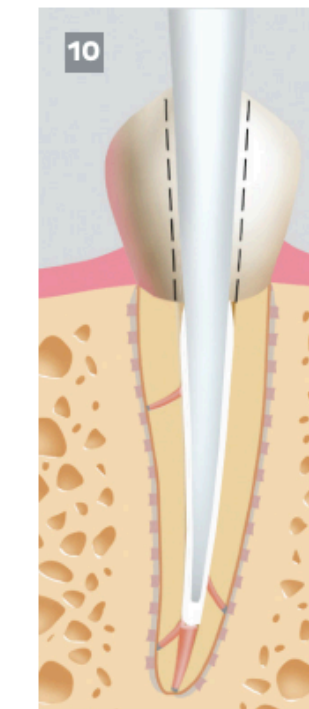
Set the heat plugger on the cone. Activate the heat, and downpack, releasing your finger from the operating switch shy of the binding point and maintaining apical pressure for 10 seconds.



Activate the heat switch for a 1 second separation burst, pause 1 second and remove the heat plugger.



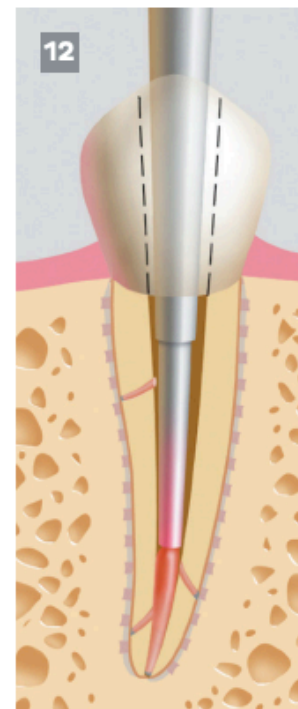
Select the appropriate Buchanan Hand Plugger, and using the NiTi end, condense the apical mass while removing any material from the canal walls.



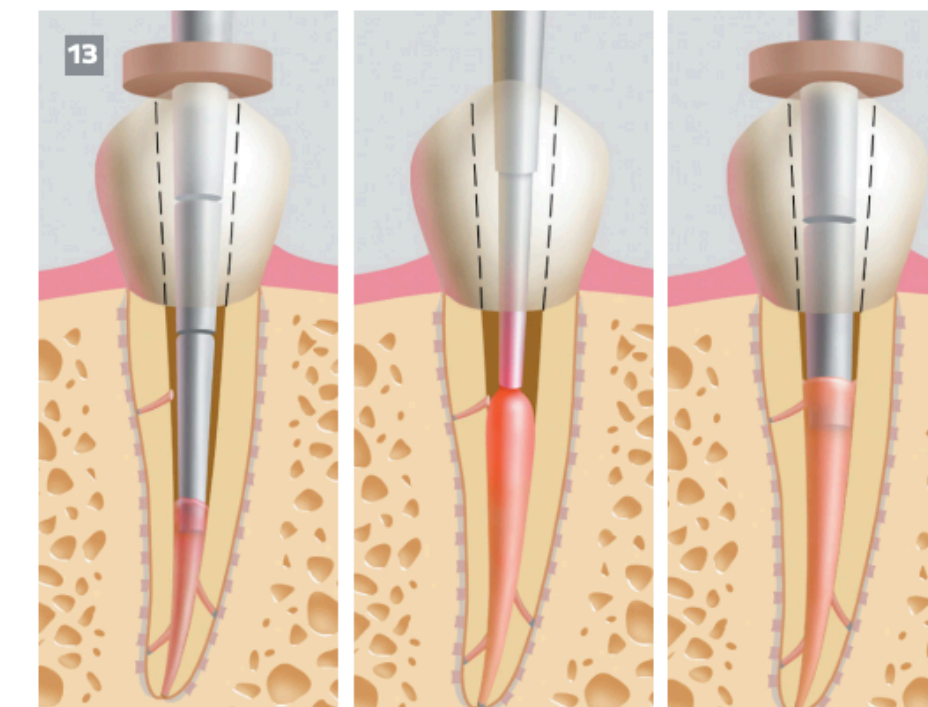
Lightly place more sealer in the backfill space with the tip of a paper point.



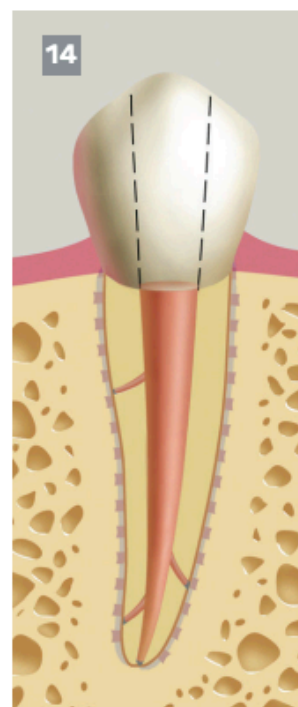
Extrude a small amount of material to heat the needle.



Place the Backfill device needle in the canal short of the condensed fill, wait 5 seconds for the needle to reheat. Backfill the canal 1/2 way. Using the NiTi end of the Buchanan Hand Plugger, condense the fill.



Re-insert the needle, wait 5 seconds for it to reheat, backfill to the canal orifice.



Select the appropriate Buchanan Hand Plugger and, using the stainless steel end, condense the coronal fill.