

Warm Vertical Compaction Continuous Wave Technique

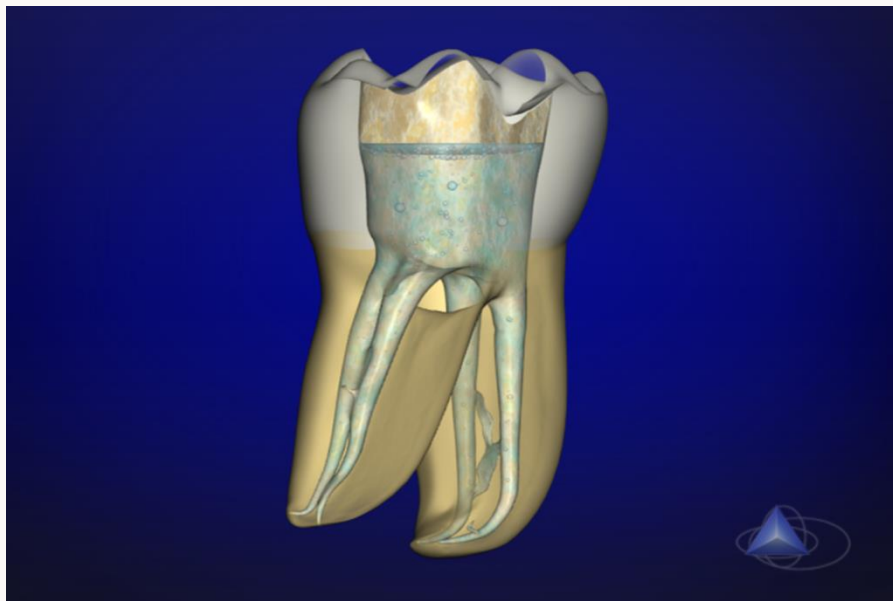


MODULE 8

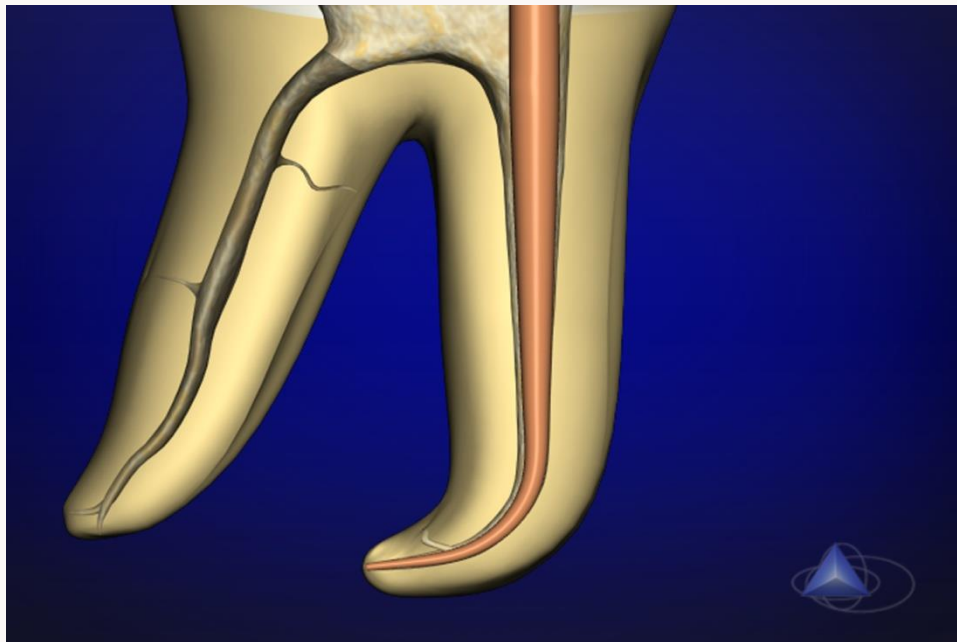
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Cone Fit & Pluggger Selection

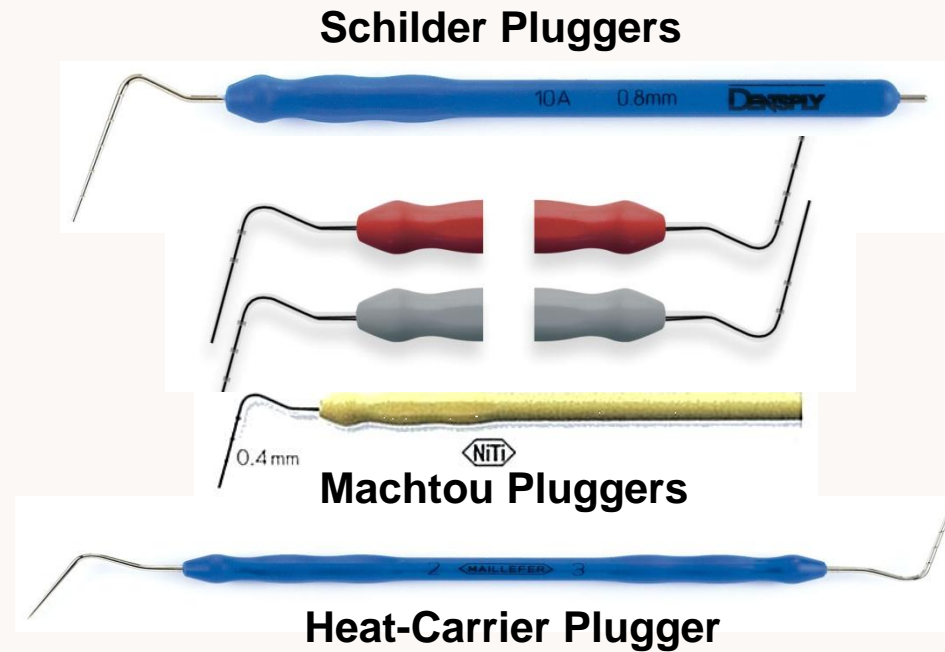


**Irrigation and desinfection
of root canal system**

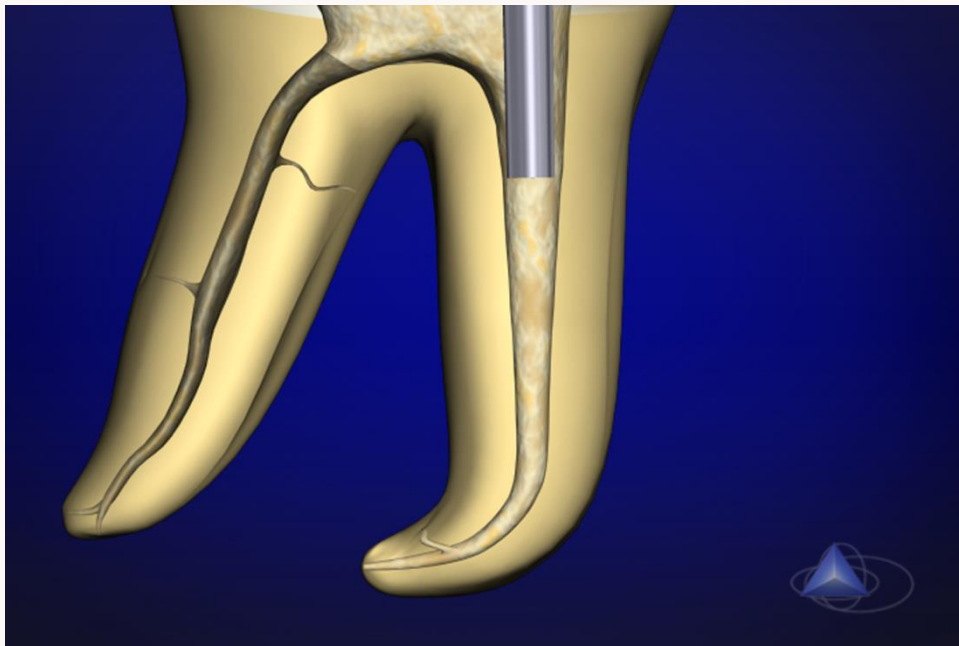


**Manual Pluggers
for compaction**

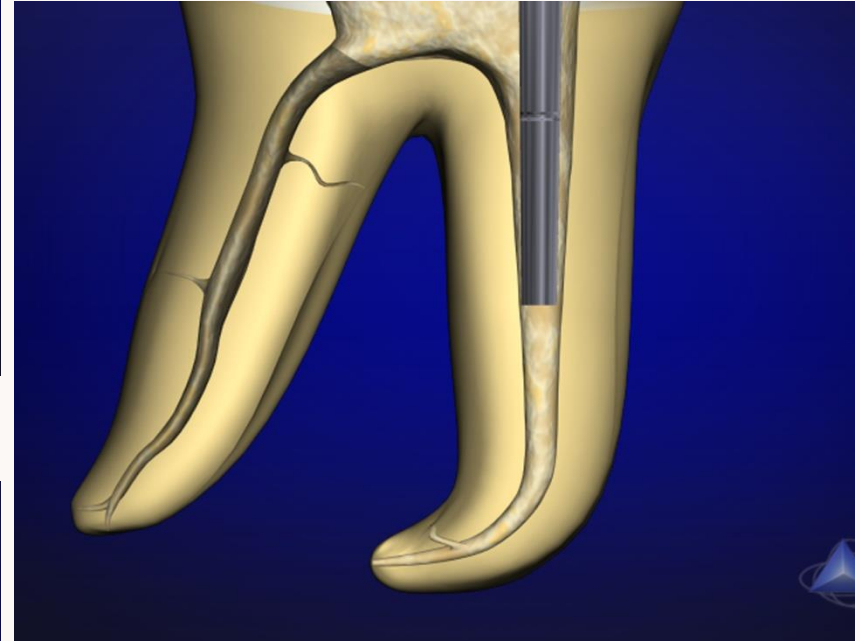
**Fit a nonstandardized
tapered master cone**



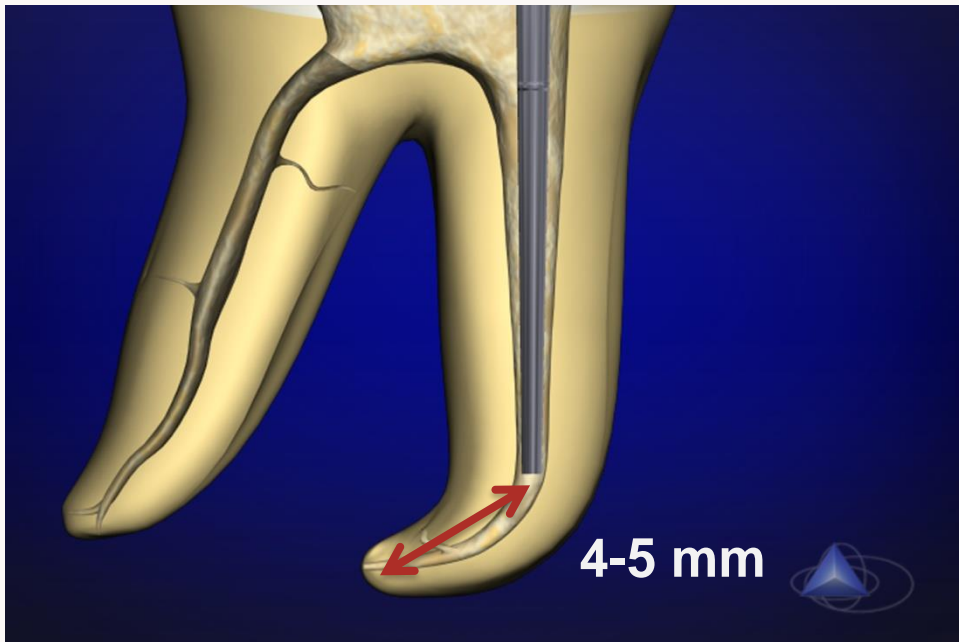
Heat-Carrier Plugger



Selection large size manual plugger

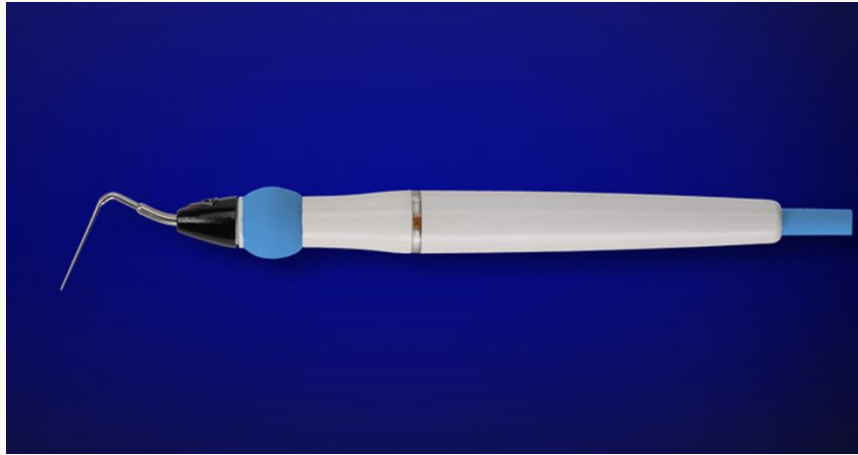


Selection medium size manual plugger



Selection small size manual plugger

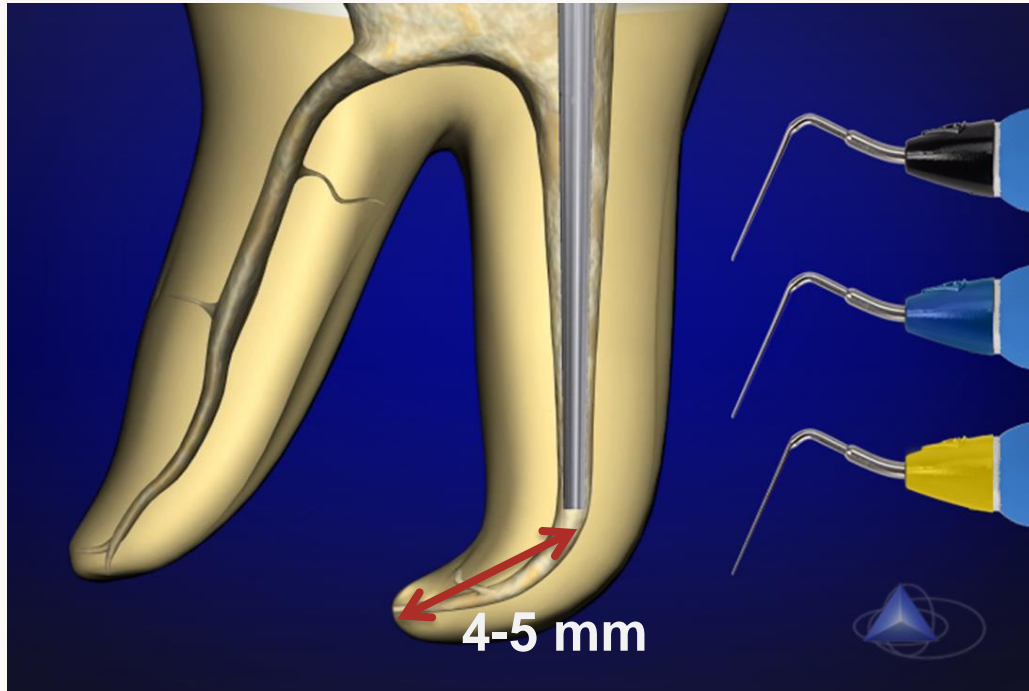
Down-Pack handpiece



1 warm pulp-tester

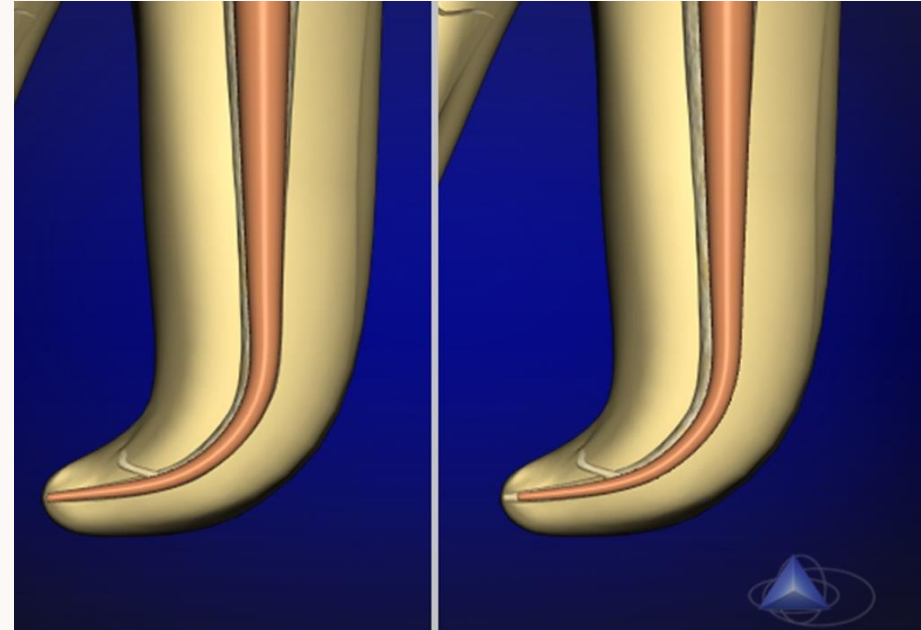
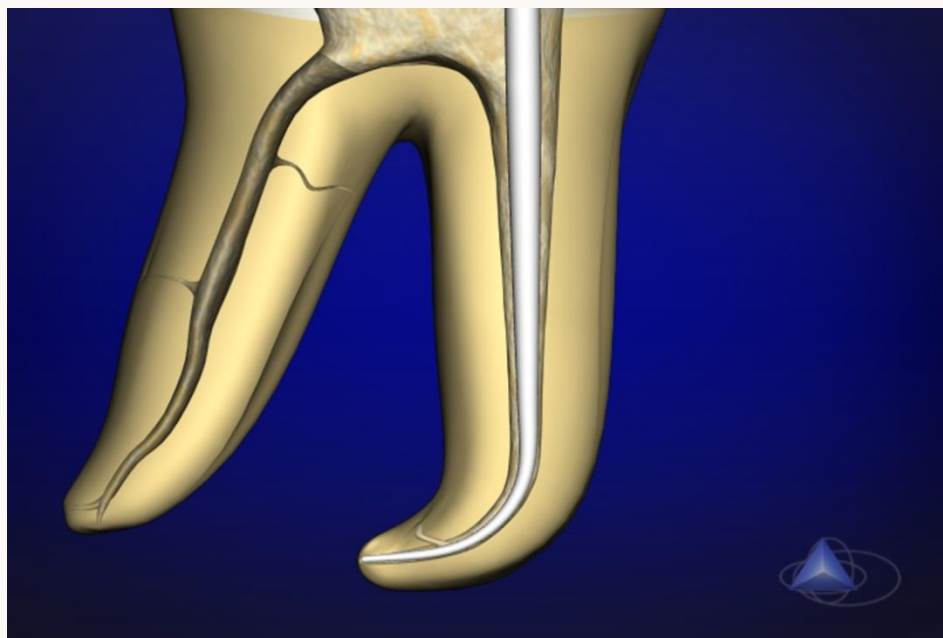


Selection of the Heat Plugger

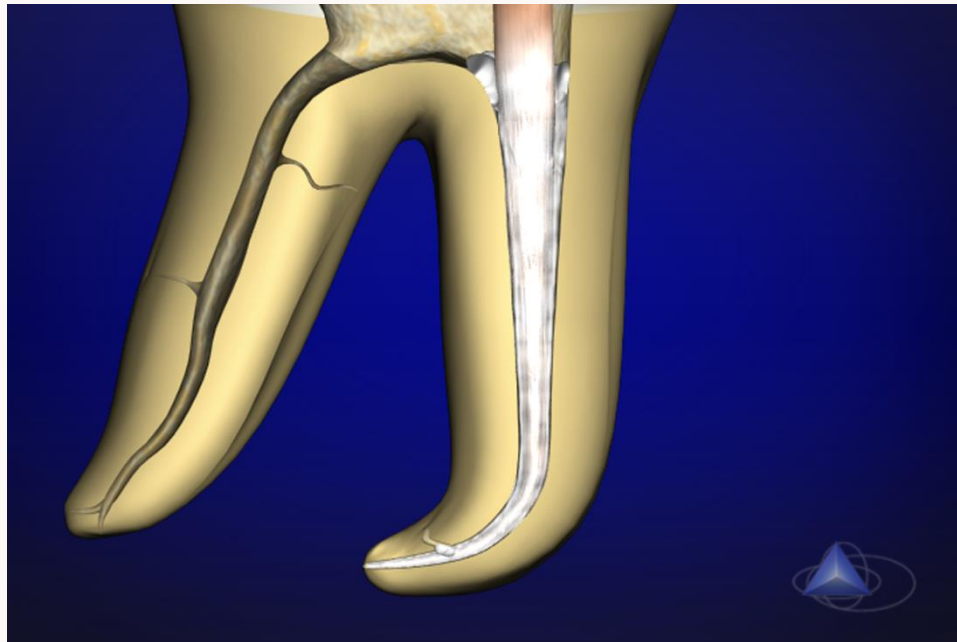


Pluggers 3 sizes

**Mesured paper point to
Working Length**



Trim the master cone



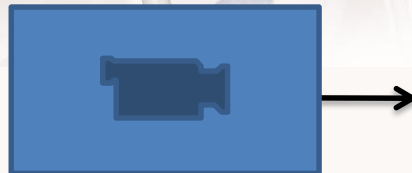
Insert lubricate (sealer) master cone

VIDEO



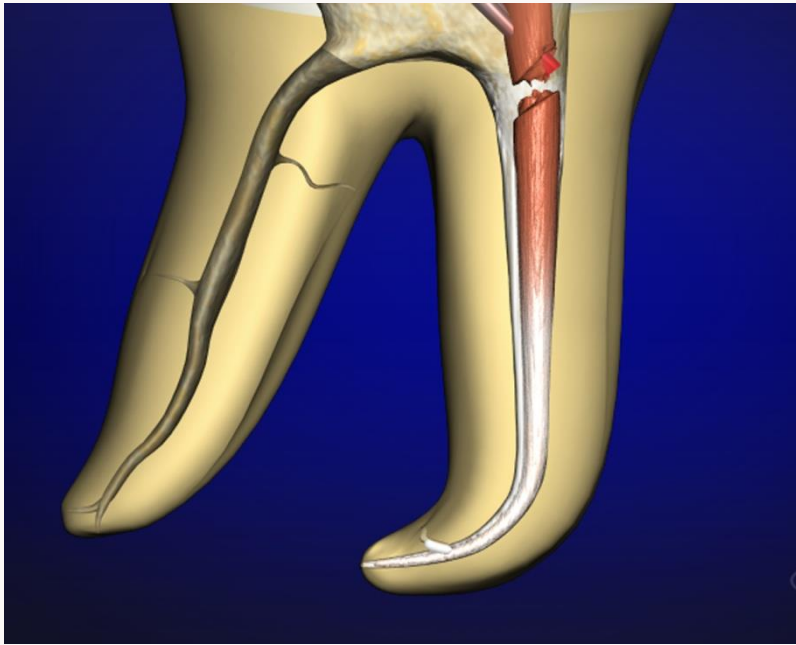
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Cone Fit and Pluggers Selection



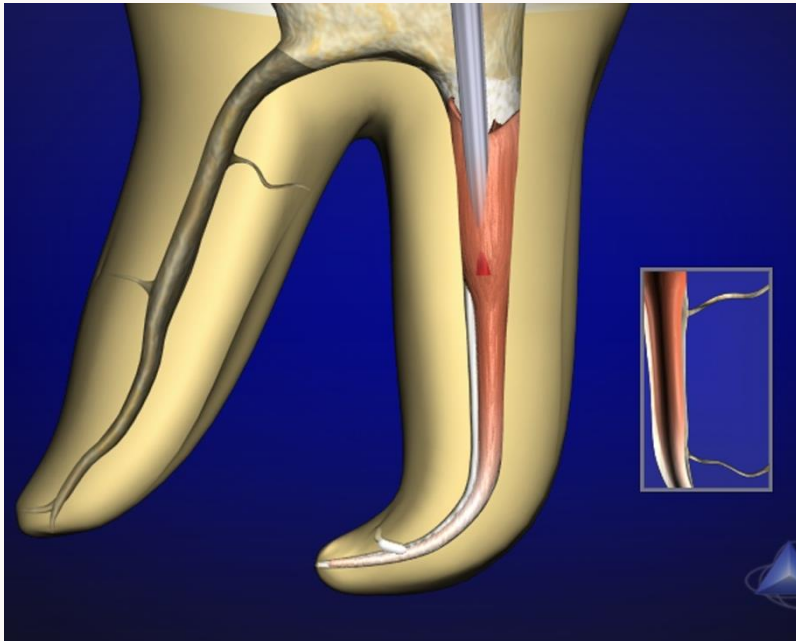
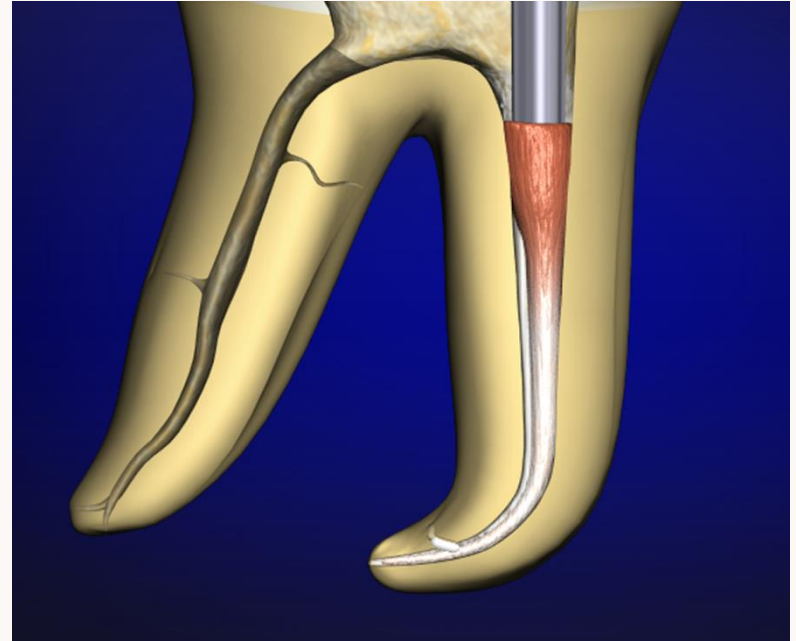
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Downpack : Vertical Condensation

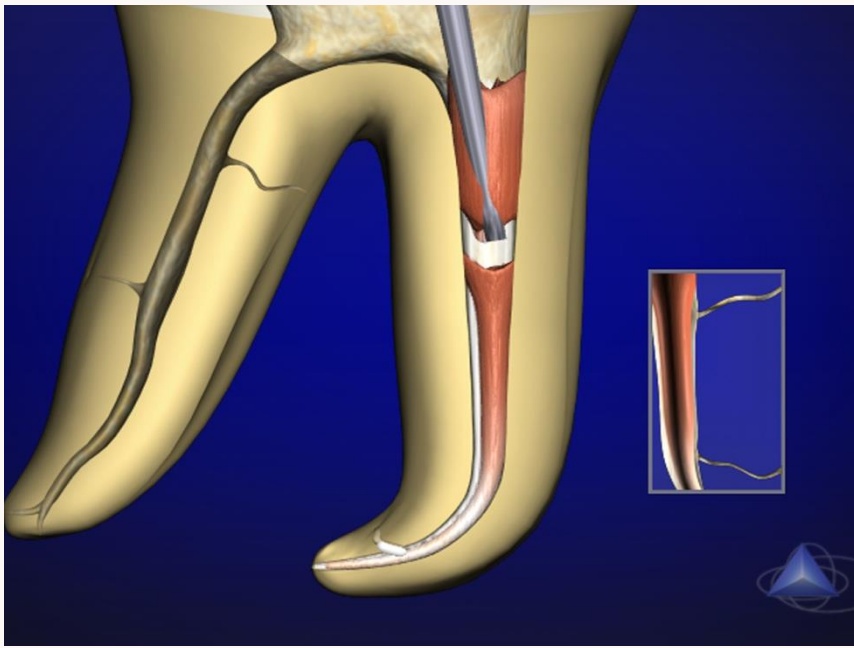


Activate Calamus and sear off the master cone

Select the larger prefit, manual plugger and move Gutta Percha apically

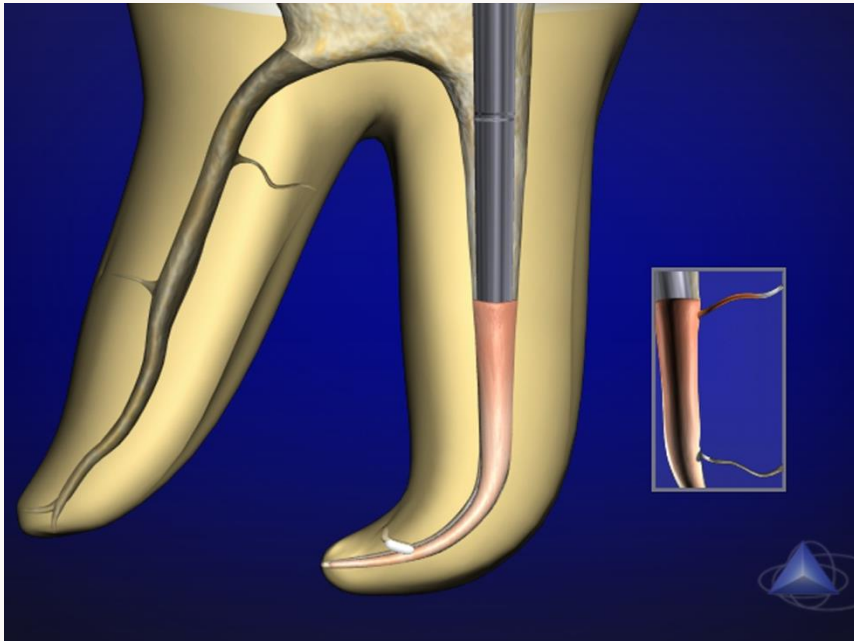
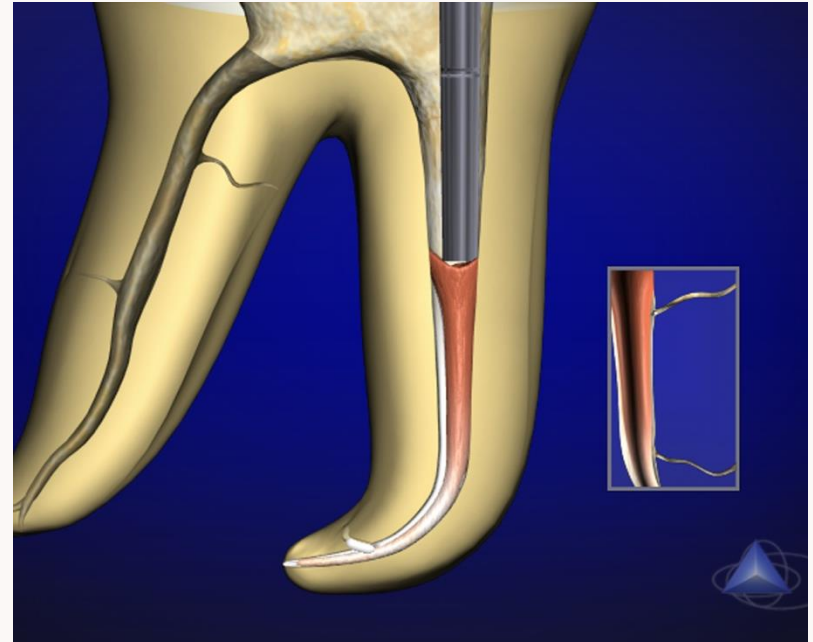


Activate Calamus and plunge 3-4 mm into the gutta-percha

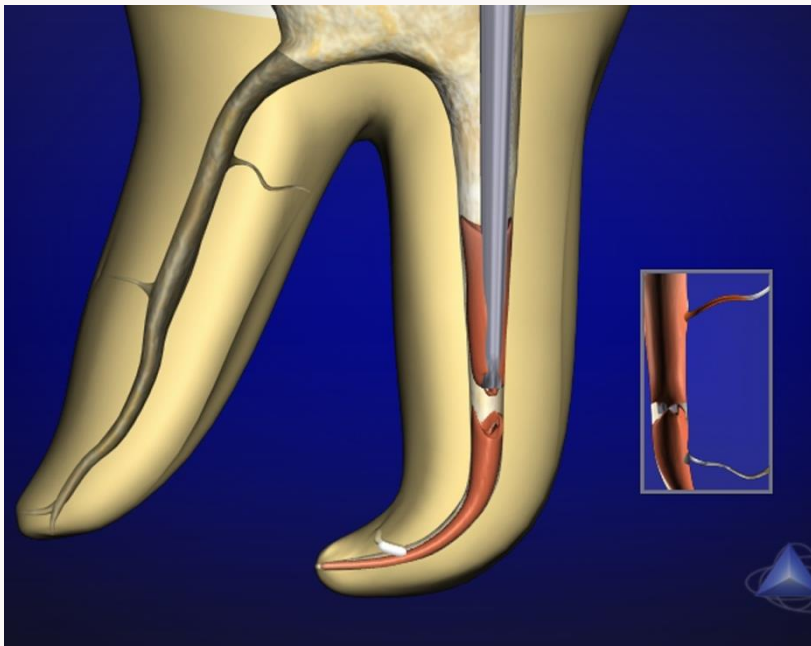


Desactivate Calamus 1-2 seconds, then remove “bite” of Gutta Percha

Select the medium size, manuel plugger and move Gutta Percha apically

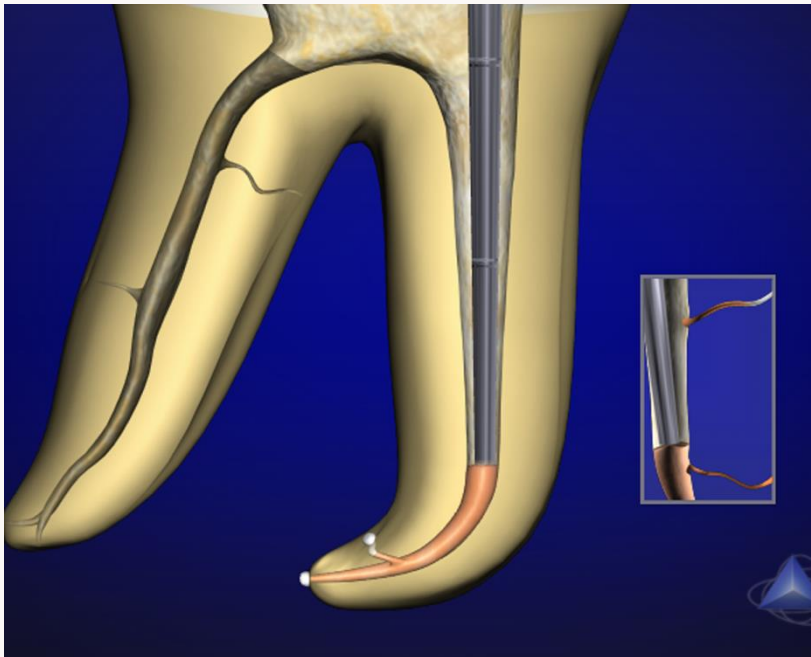
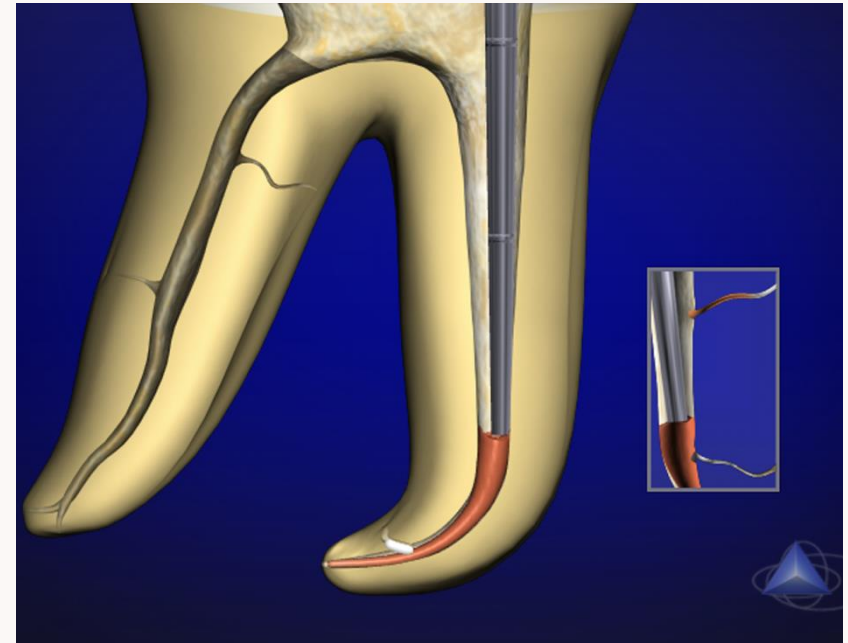


Press apically for 5 seconds



Activate Calamus, plunge deeper 3-4mm and wait 1-2 seconds after deactivate it

Select small size manuel Plugger, move gutta-percha apically



Press small Plugger 5 seconds into the apical third

VIDEO

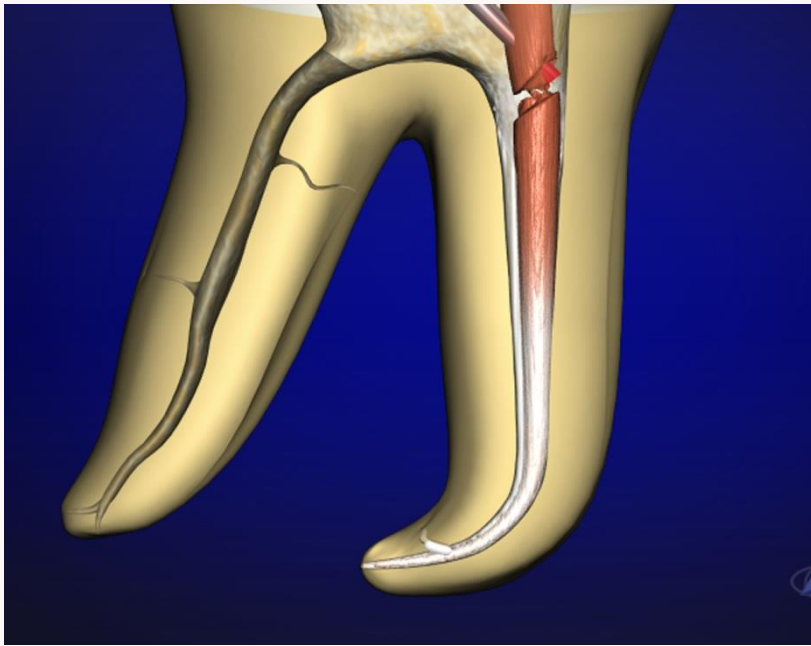


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Vertical Condensation

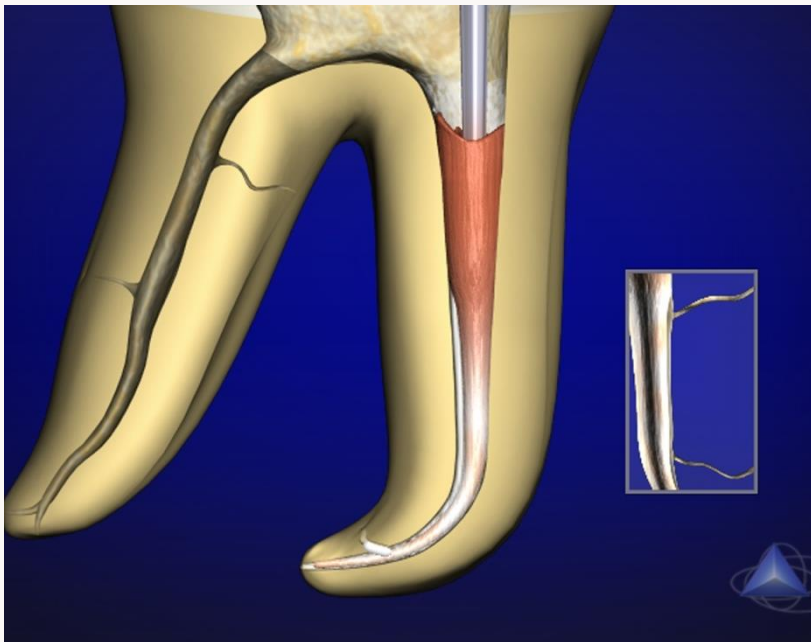
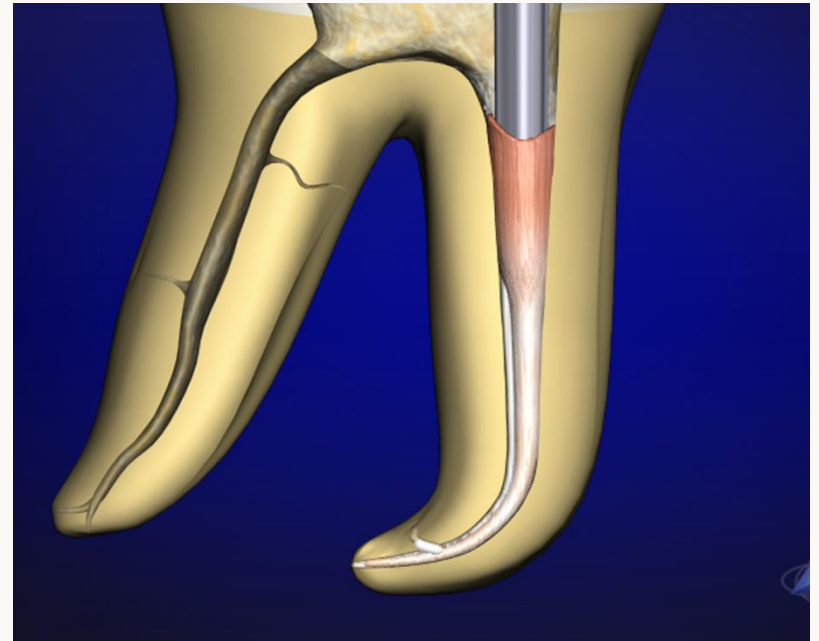


Downpack : Continuous Wave Technique

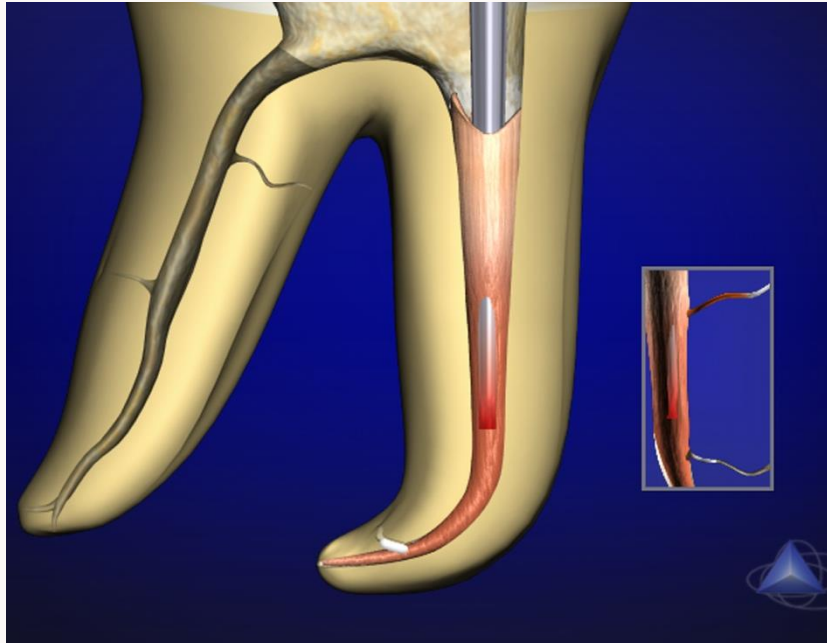


Activate Calamus and sear off the master cone

Select the larger prefitt, manual plugger and move Gutta Percha apically

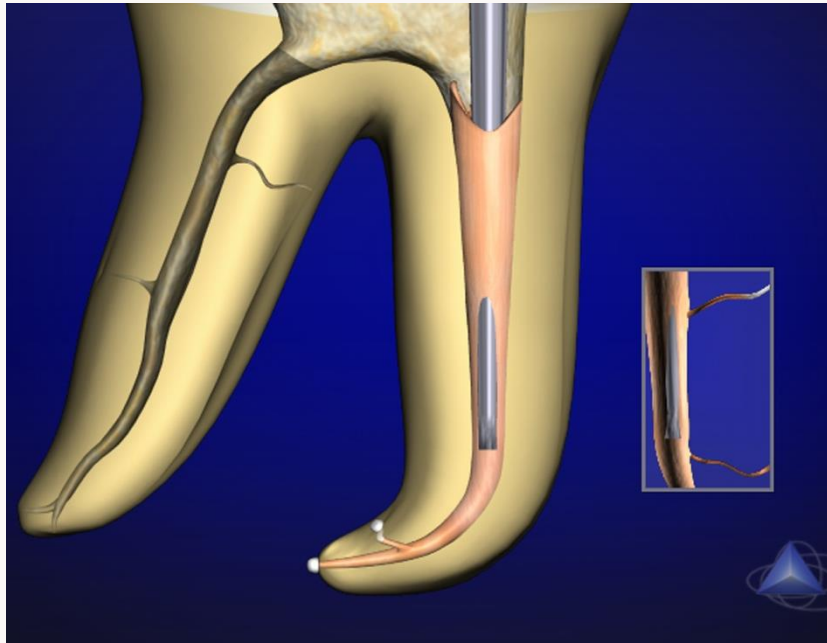
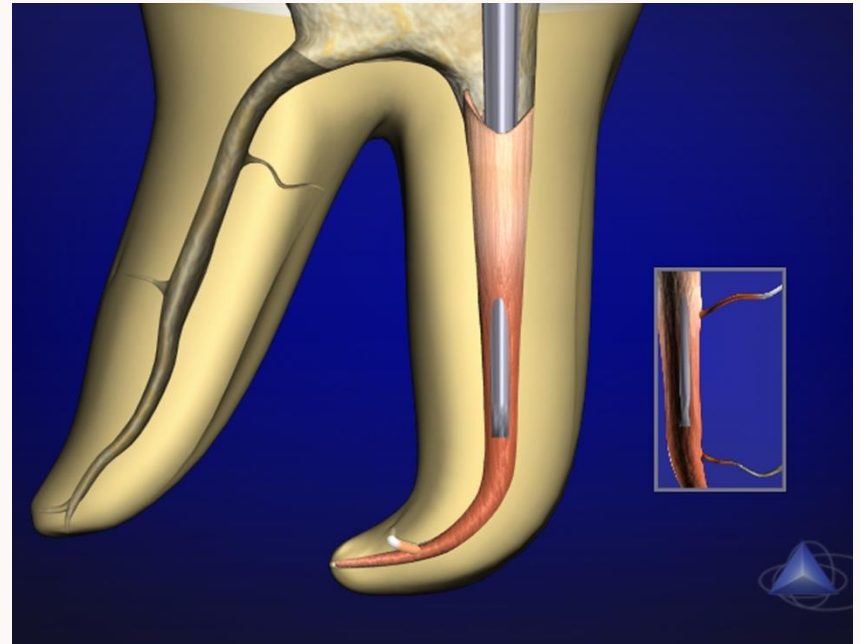


Activate Calamus



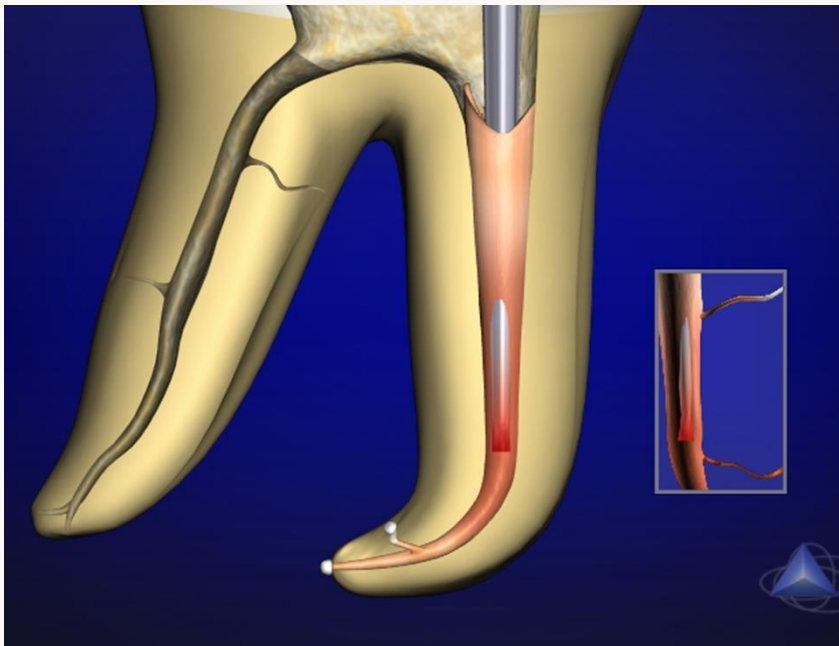
In one continuous motion press until the “stop” is at 2 mm of the reference point

Deactivate Calamus, maintain firm apical pressure till the reference point is reached

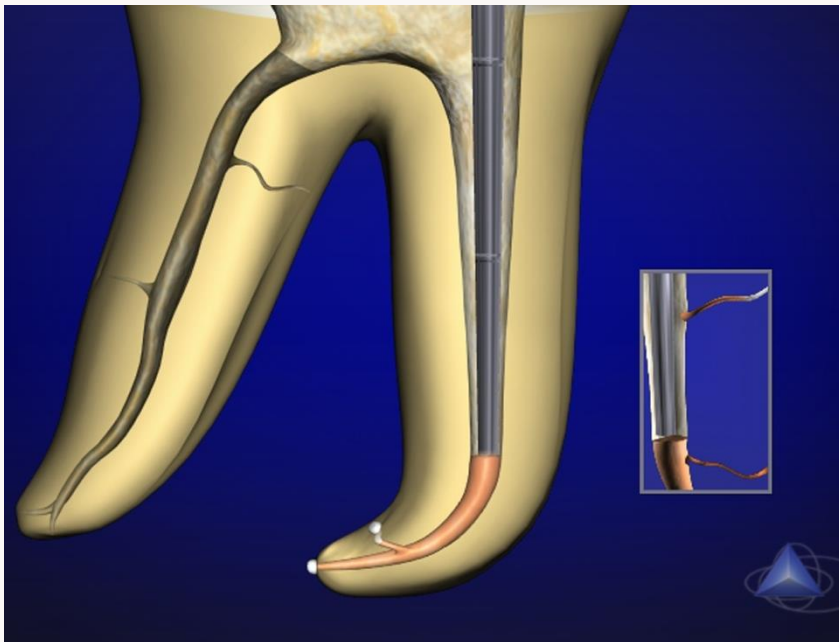
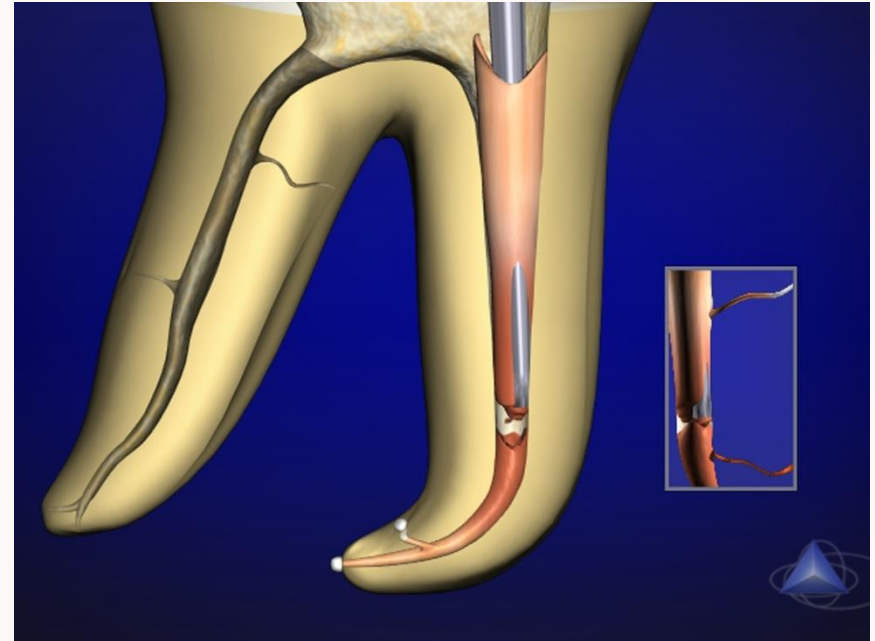


Maintain firm pressure for 10 seconds

Activate Calamus for 1-2 seconds and deactivate, then remove the plugger



This will separate and remove Gutta-Percha



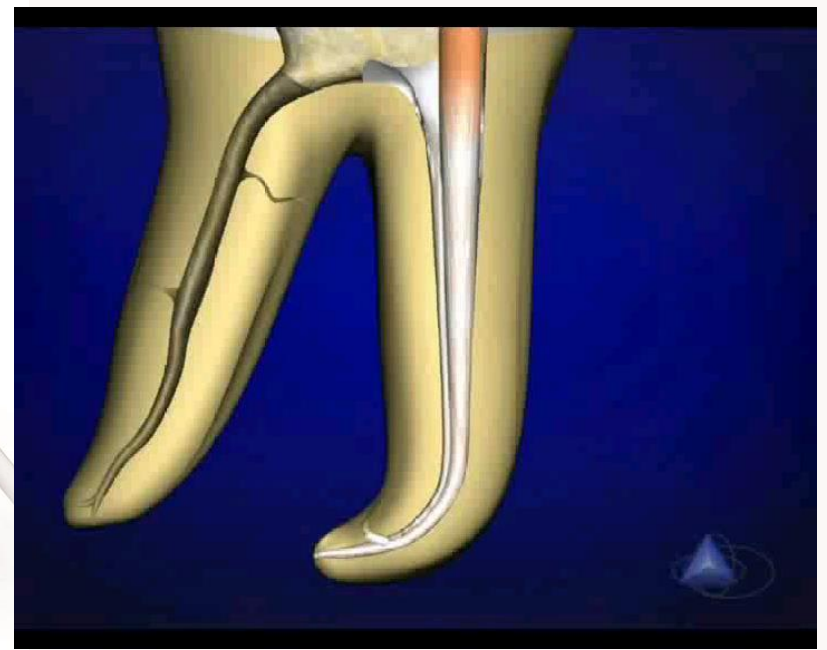
Select the small size, prefitted manual plugger and condense the Gutta-Percha

VIDEO



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Continuous Wave Technique

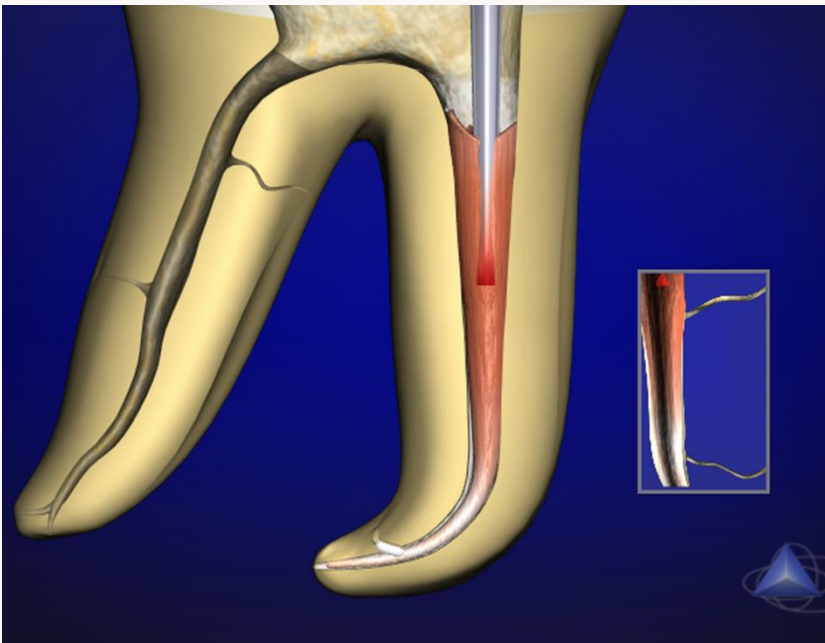
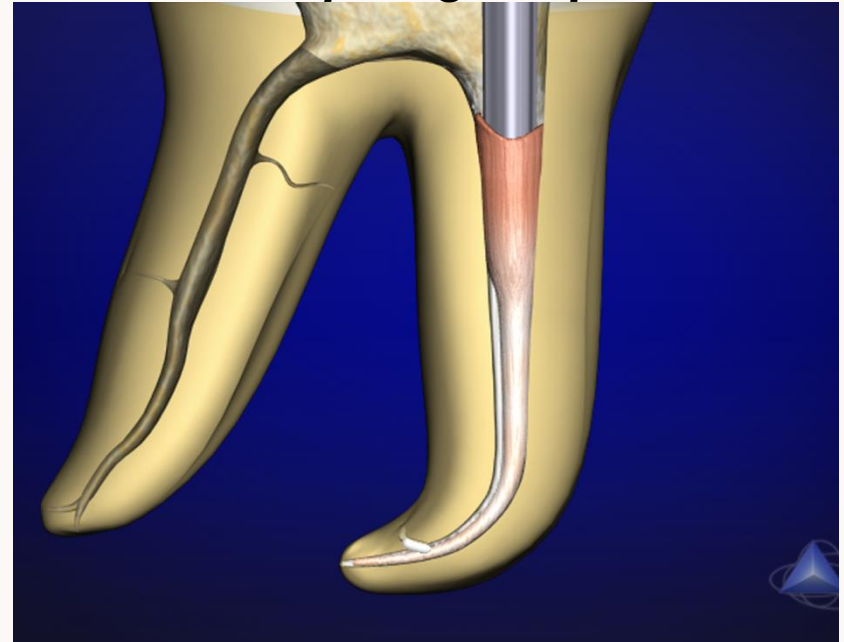
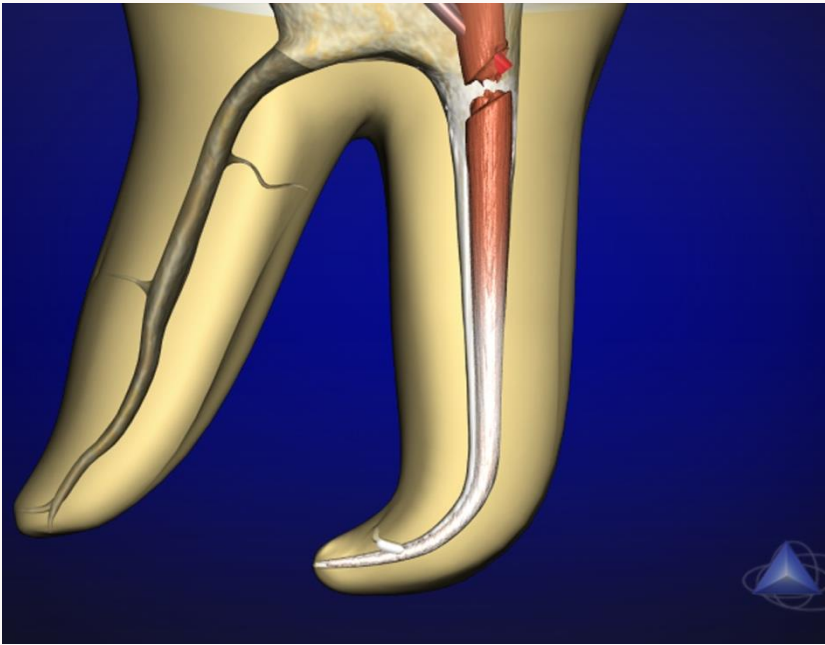


Downpack : Hybrid Technique

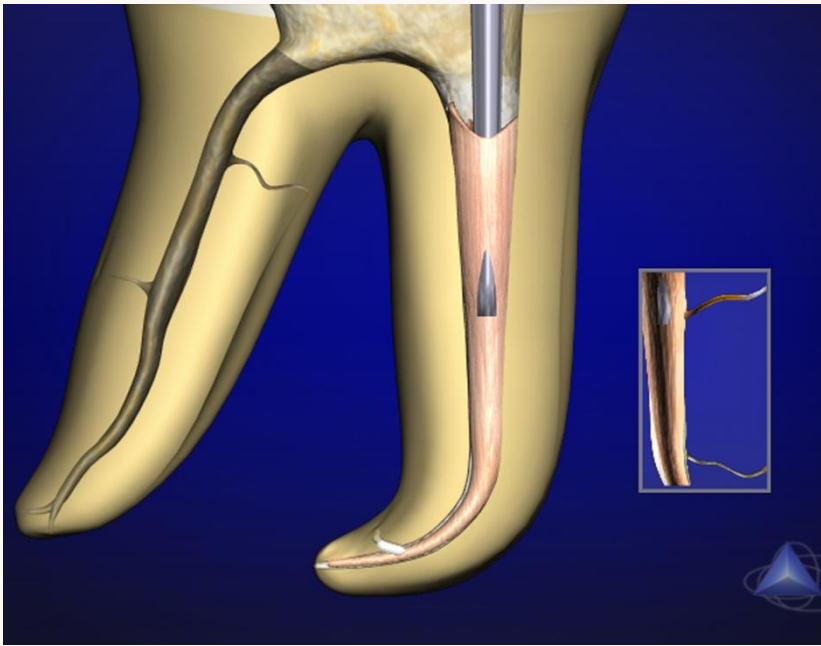
Activate Calamus and sear off the master cone

Select the larger prefit, manual plugger and move Gutta Percha apically, press 5 seconds to compact gutta-percha

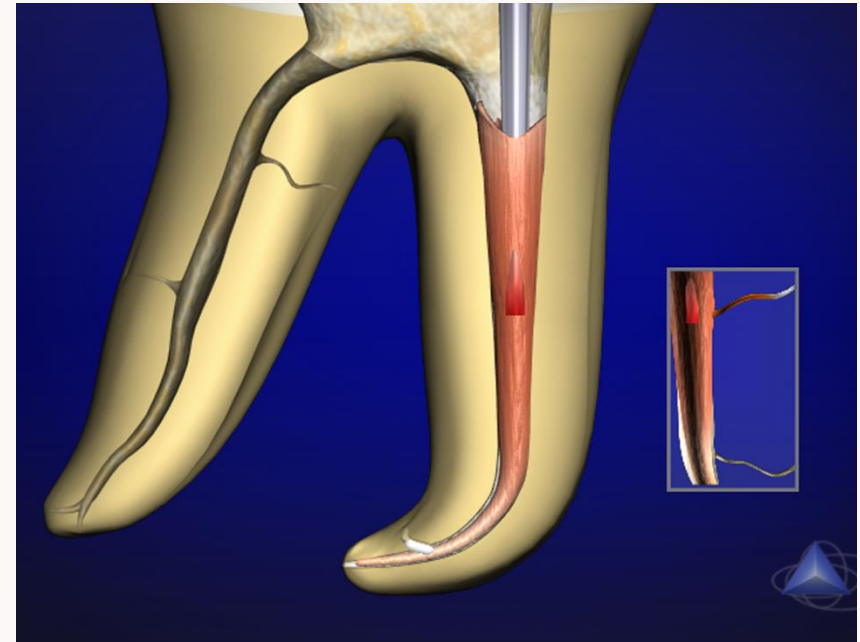
Activate Calamus and plunge 3-4 mm into the gutta-percha



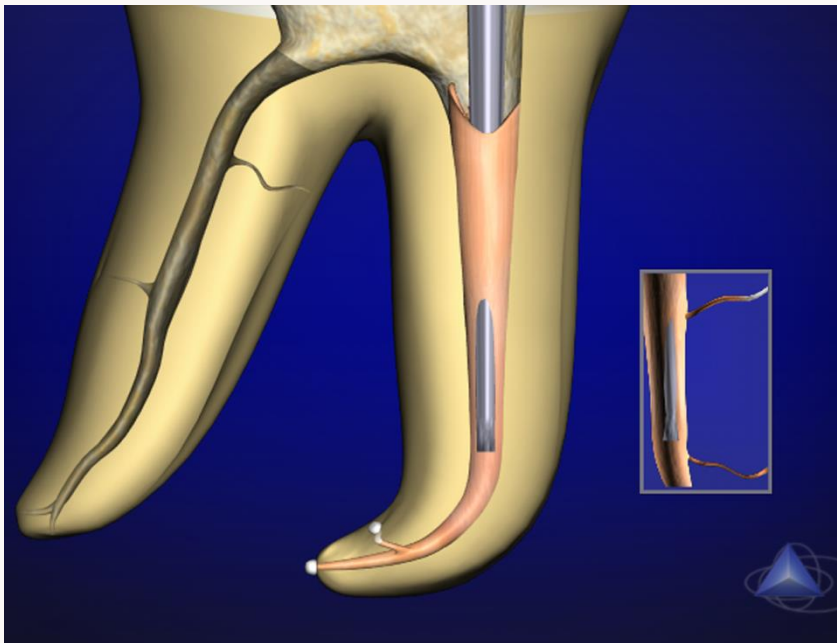
Deactivate Calamus maintain 5 seconds pressure to compact gutta.percha

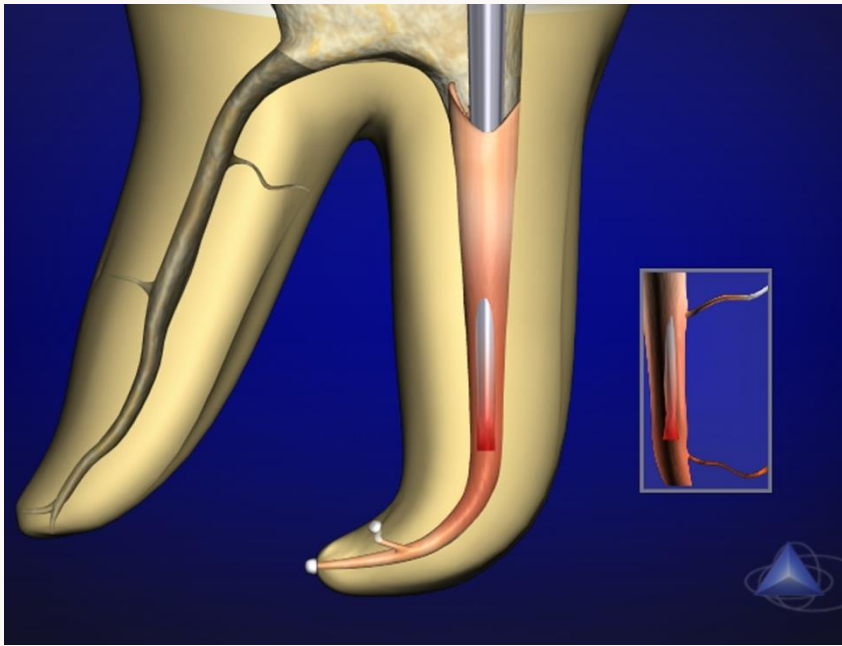


Activate Calamus



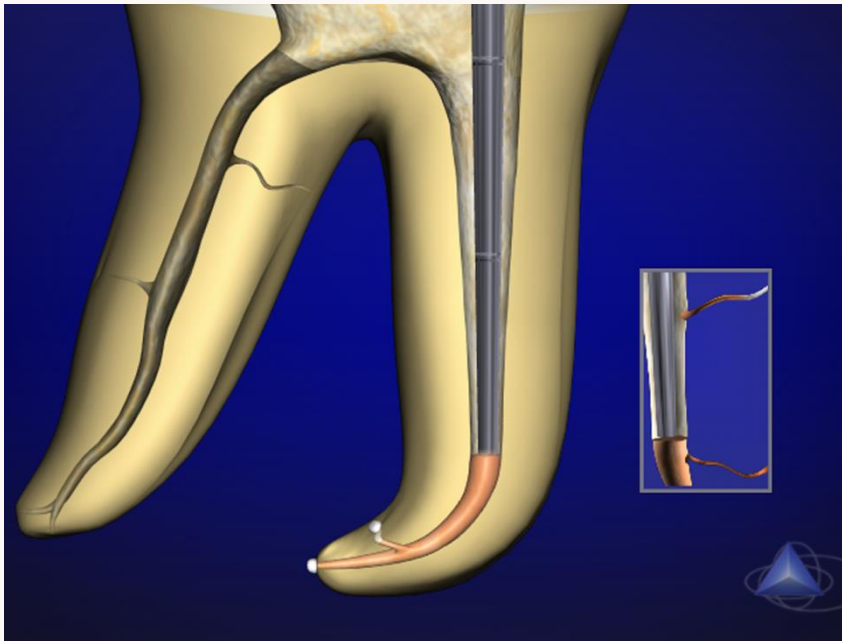
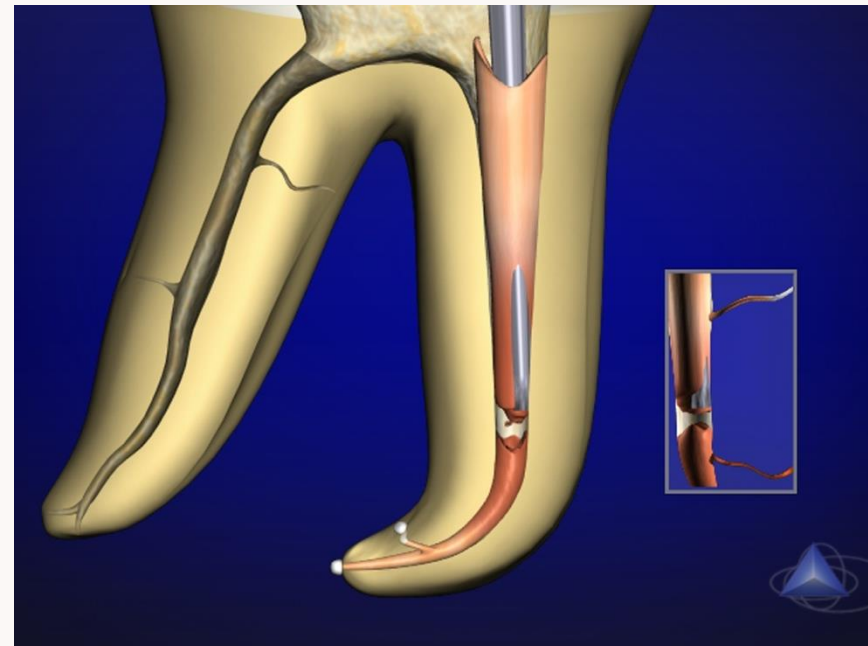
Deactivate and maintain 5 seconds . Maintain apical pressure till the working depth is reached





Activate Calamus 1-2 seconds

Desactivate and remove the plugger.



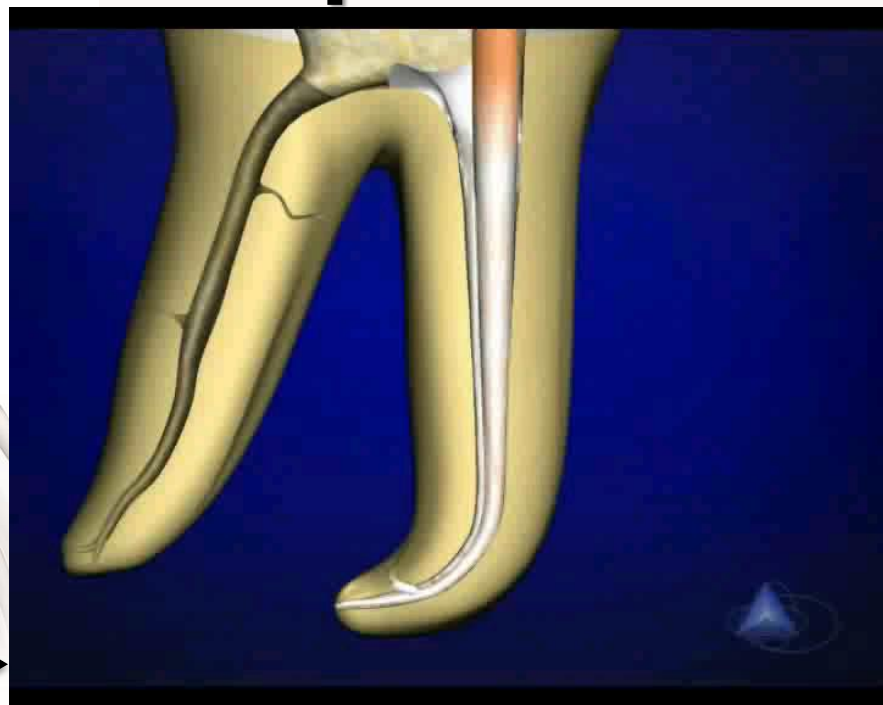
Select the small size, prefitted manual plugger and condense the Gutta-Percha

VIDEO



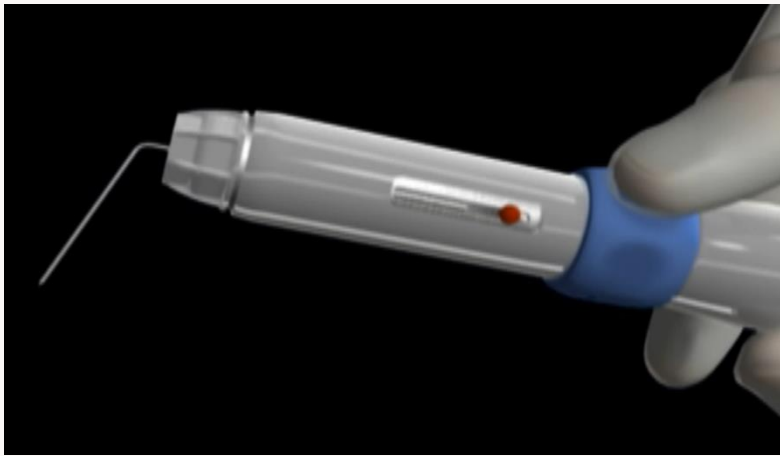
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Hybrid Technique



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BACKPACK Technique: “Calamus Flow”



Calamus flow handpiece



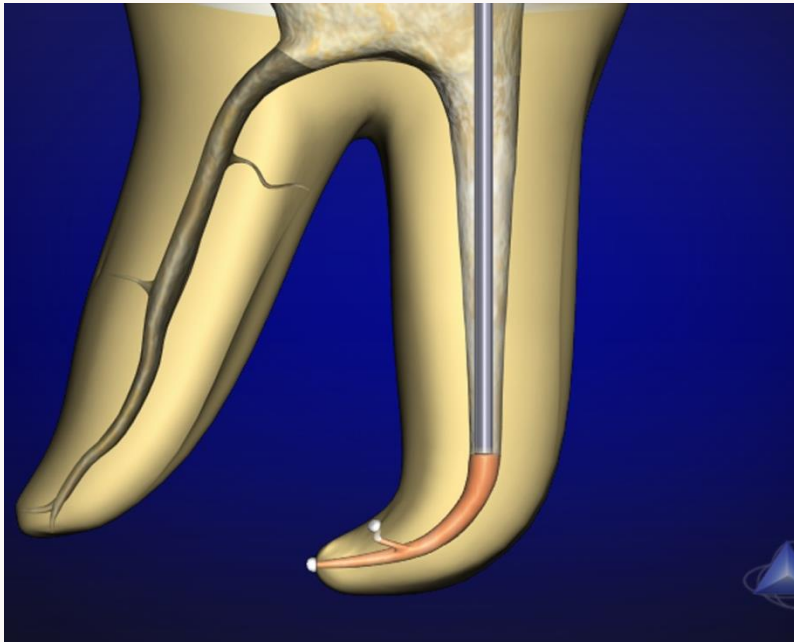
**#20(0,8) and
#23(0,6)**

Cartridge of Gutta-Percha

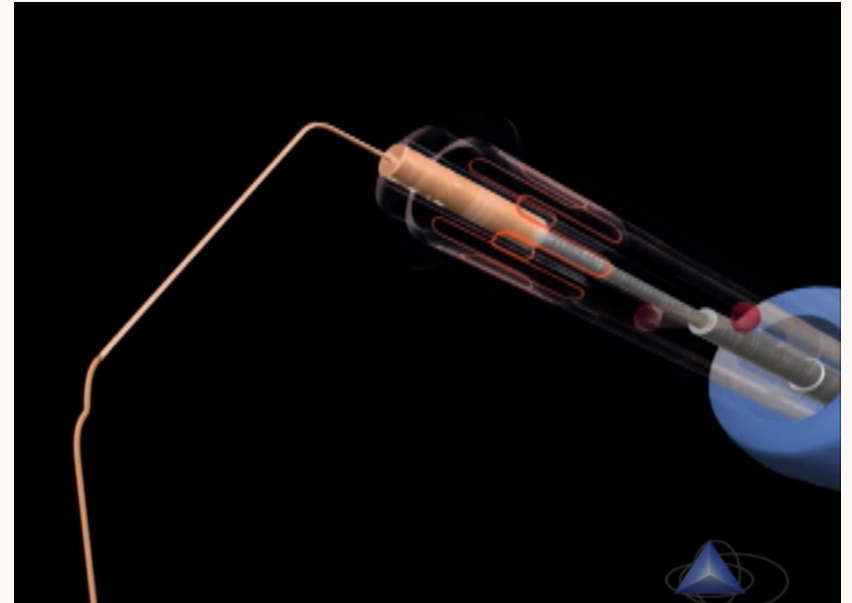


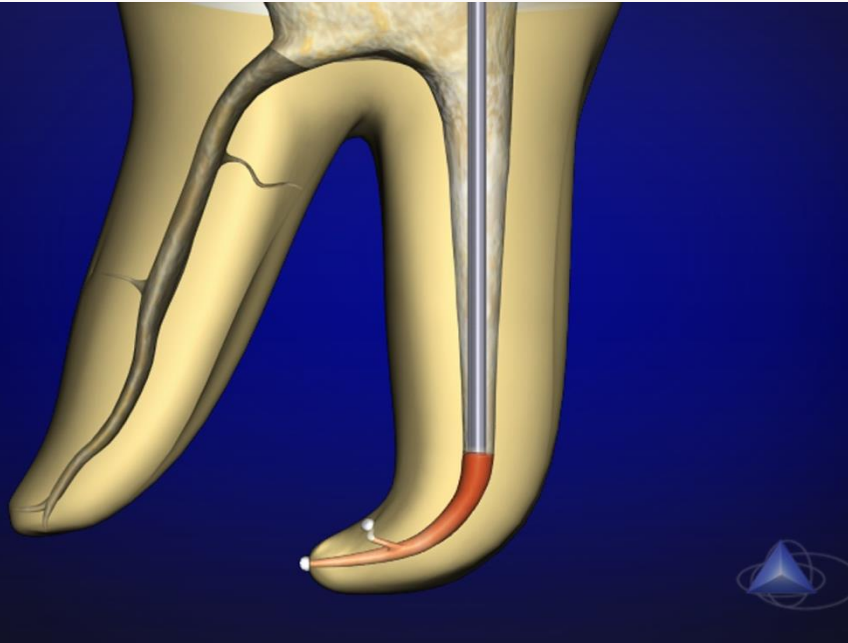
Cartridge-tip bender

Internal view of activated flow handpiece



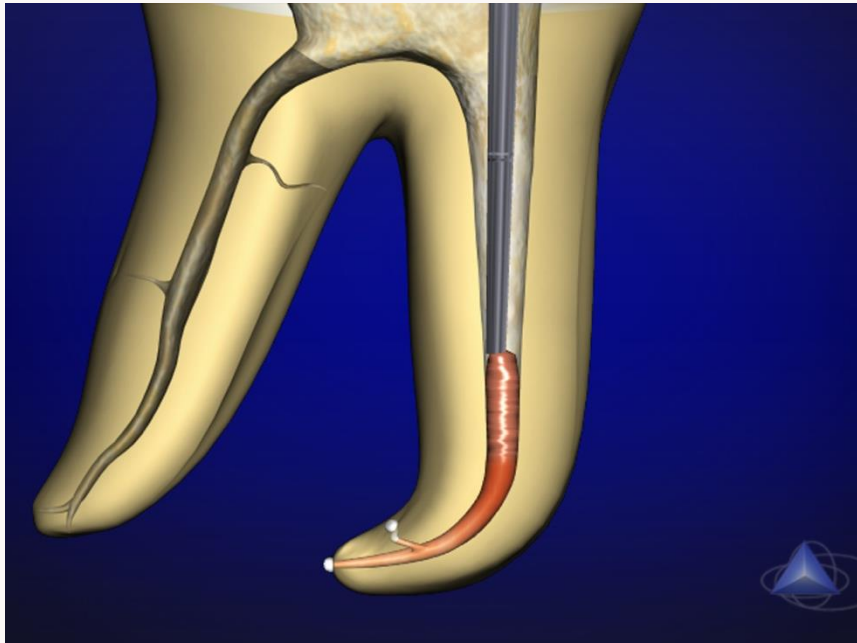
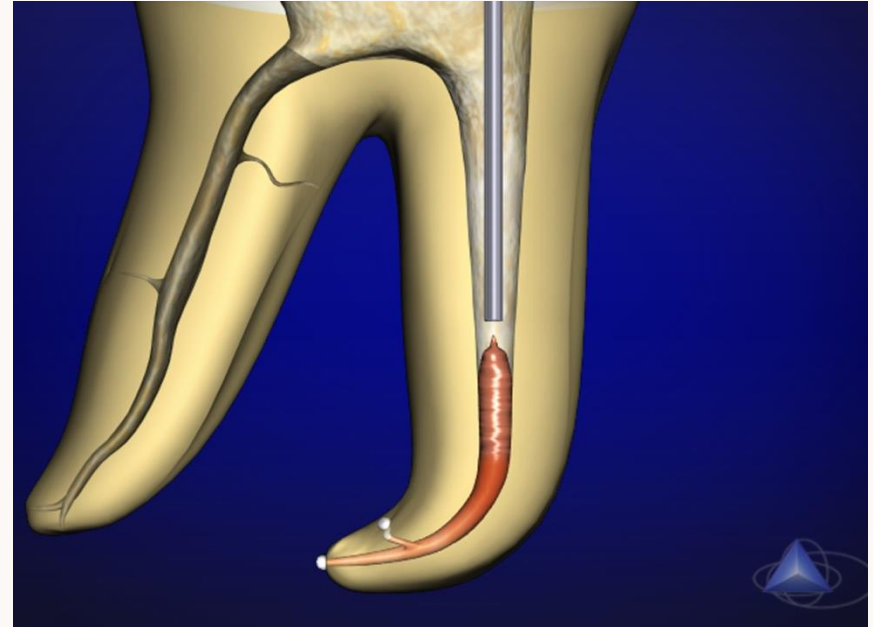
Position the tip against the packed filling material



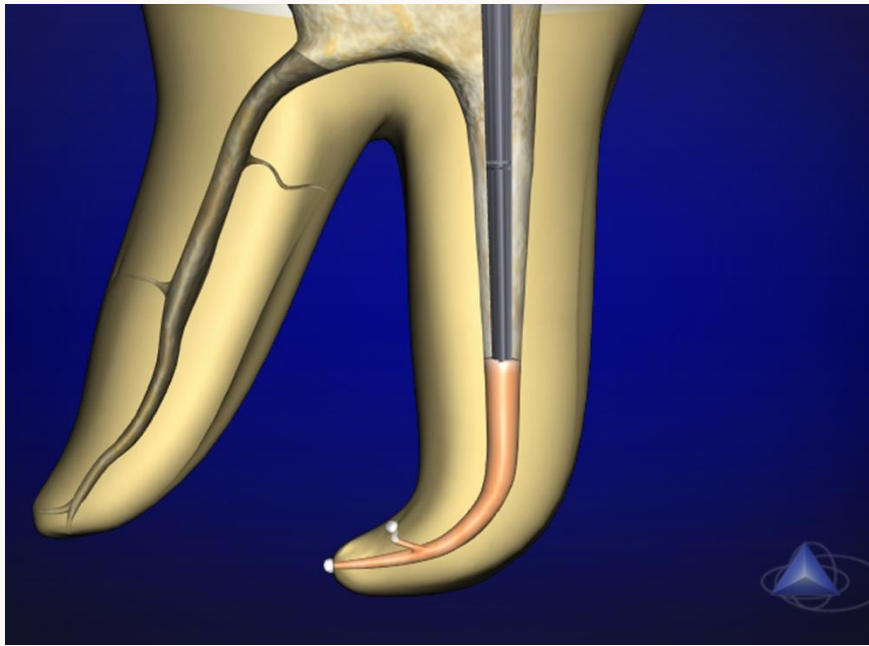


***Placing warm tip against packed-material
re-thermosoftens gutta-percha***

***Activate Calamus flow , dispense 2-3 mm
warm gutta-percha***

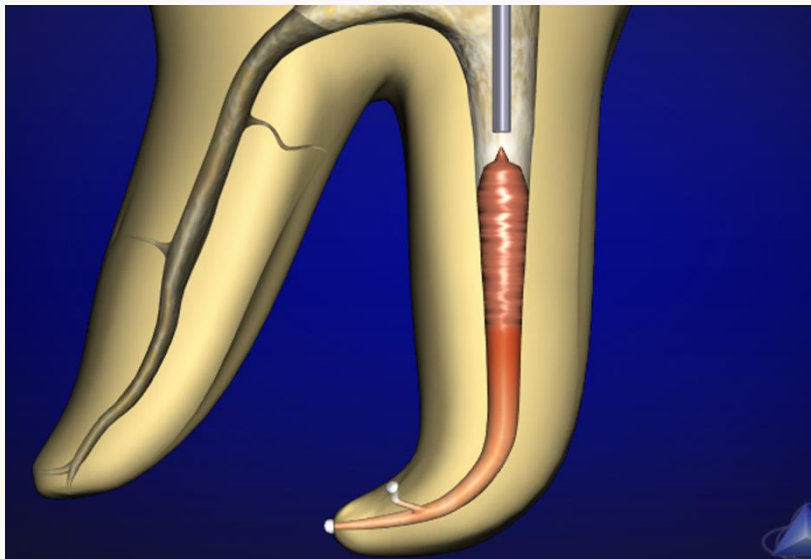
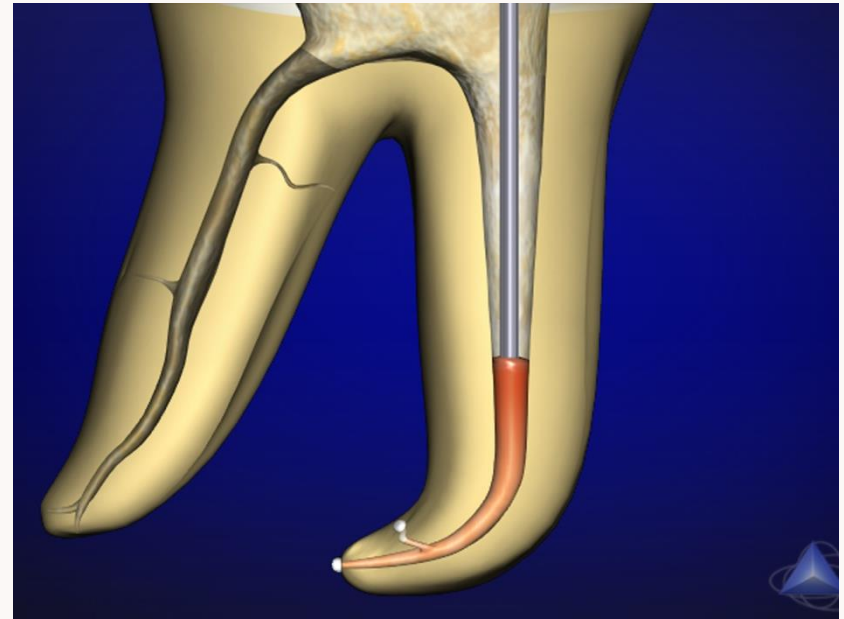


***Select smaller prefit manuel plugger
and condense material***

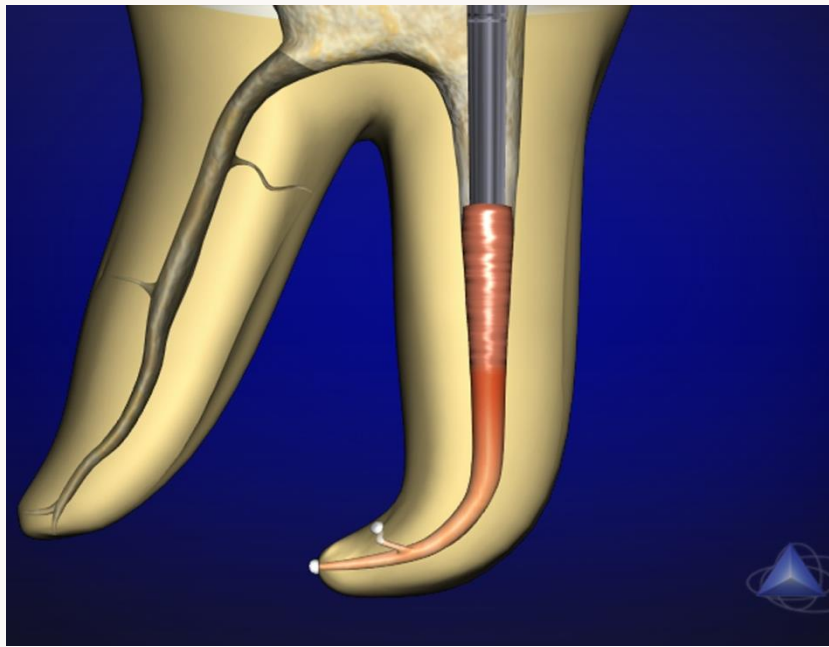


With the same plugger, press 5 seconds to avoid shrinkage during cooling phase

Position tip 5 seconds against packed material

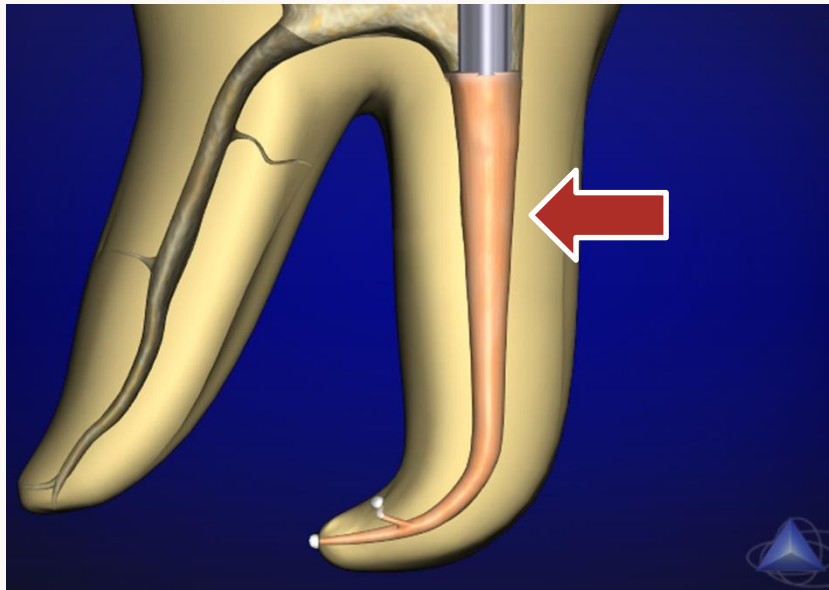
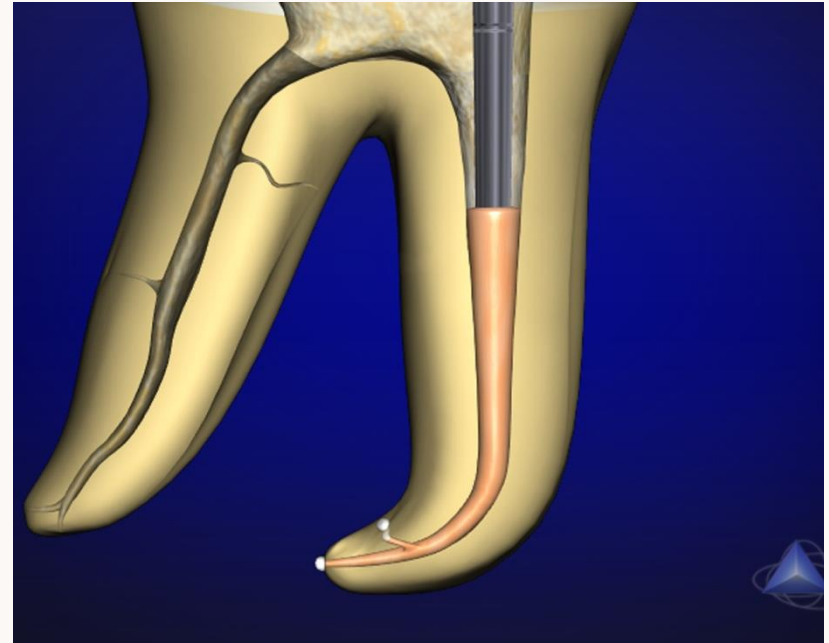


Activate Calamus flow and dispense 3-4 mm warm gutta-percha



With a prefit, medium size manual plugger condense the material

And press the material for 5 seconds (avoiding shrinkage)



Continue the backfilling in the same manner until the canal is full **OR** stop to accommodate a post for restorative