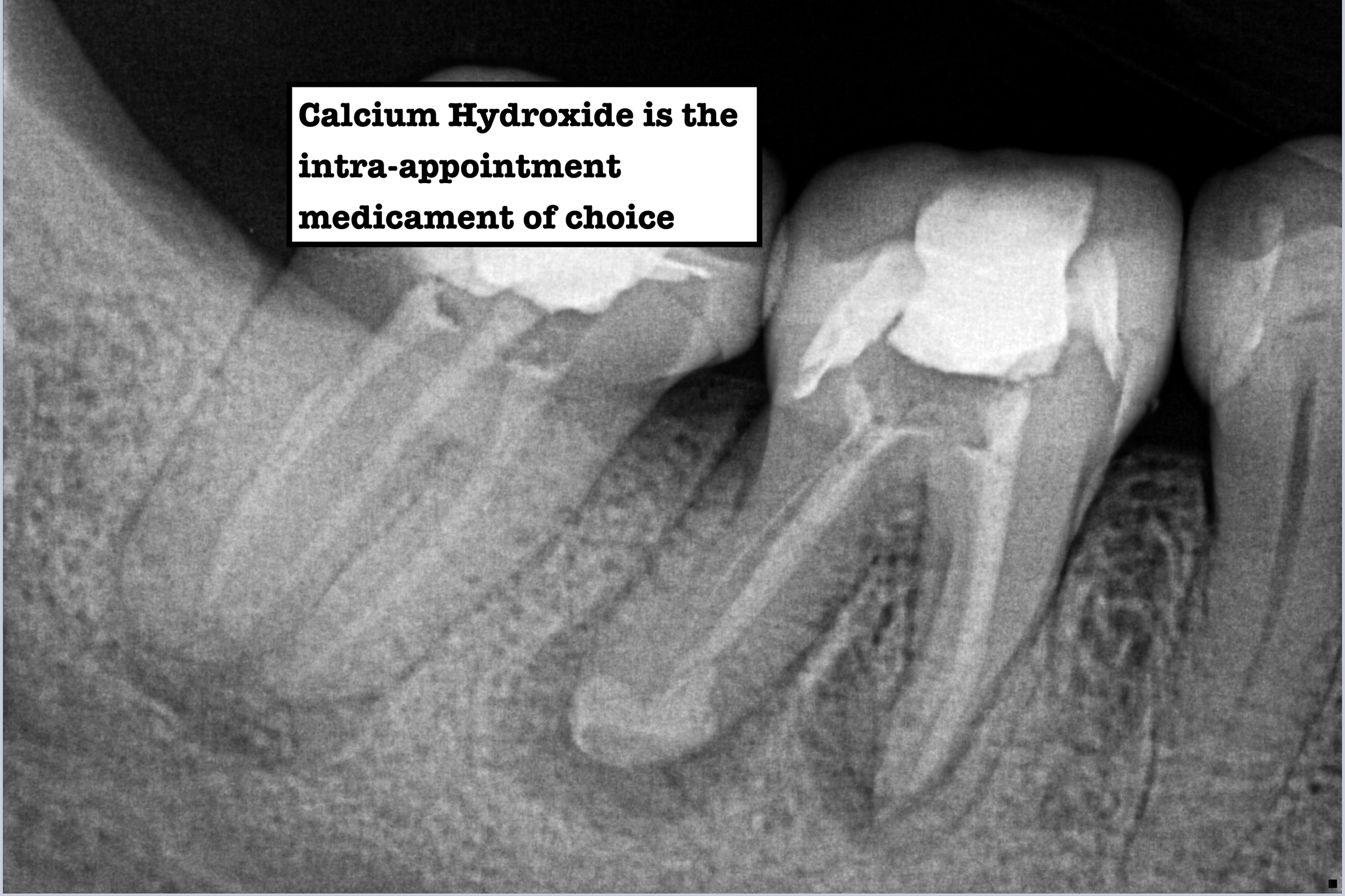
FOCUS:

# REMOVING CA(OH)2 (CASE #5)




**THE PATIENT PRESENTS FOR THE SECOND VISIT (COMPLETION)- WHAT IS THE MOST EFFICIENT AND EFFECTIVE WAY TO REMOVE CA(OH)2?**

# REMOVING CA(OH)2

If you use a water based calcium hydroxide paste (non-iodoform) then it should be easy to remove the majority of the material from the canals. #1- Access and remove cavit and sponge. #2- Immediately use a side vented needle (end capped preferably- ProRinse needles from DentsplySirona are great but pricey) and irrigate out the majority of the Ca(OH)2 with 3-6% bleach. This loosens up the Ca(OH)2 and makes it easier to remove in bulk. I then use an endoactivator (DentsplySirona- $400) and place it in each canal for about 15 seconds. The sonic vibration of the polymer tip further loosens and helps remove the Ca(OH)2 off the canal walls. If you have PIPS (laser assisted irrigation) then by all means PIPS the shit out of it! I still love you PIPSTERS. #3- Re-irrigate with bleach and then re-gain patency with a #10K file with ProLube or RC Prep (assuming you already had working length from the first visit). Re-irrigate again. Use copious amounts of bleach to irrigate the canals and remove the Ca(OH)2 paste all throughout the 2nd visit. #4- Use your last shaping file that you used in the first visit and shape again down to length. This further encourages removal of Ca(OH)2 off of the canal walls. I typically try to do the majority of shaping during the first appointment so it is close to ready to obturate at the 2nd. If you haven't shaped to length yet, now proceed to do so.

# REMOVING CA(OH)2- QUESTIONS

**Why do I need to use Calcium Hydroxide? Why not just leave the canal dry?** Ca(OH)2 is a base and has a high pH >11 (12.4) and is highly antibacterial. Leaving the canals "dry" after shaping and disinfection encourages re-growth of microbes. The canals are never sterile so place an antibacterial paste to encourage microbial death not growth. Also, Ca(OH)2 seems to "soften" the dentin and If I was unable to gain patency during the first visit, I am often able to so after 1-2 weeks of a Ca(OH)2 working in the canals.

**What if some Ca(OH)2 is left on the canal walls and you obturate?** This is not ideal but in reality this happens in most cases and as long as you can get a good apical seal then most likely success is on the horizon. The only machine that completely removes Ca(OH)2 is GentleWave.

**Can Ca(OH)2 block you out on the 2nd visit?** No I have never experienced this. It is a water based paste that does not set and is easily irrigated and vibrated out of the canal. Yes, some remnants stay behind but the majority of the paste is removed.