Canal Preparation- Modified Stepback Technique

Modified stepback technique

Scout the canals and carry out Coronal Pre-flaring

Prepare the coronal two-thirds

Establish the working length: this is 0.5-1mm short of apex locator zero reading or radiographic apex

Establish a 'glide path' - using a size 10K file

Canal preparation: Prepare the canal to 3 sizes larger than the first file which binds at the apex

Step back using the next file size up 0.5-1mm from that length. Copious irrigation, recapitulation, and patency re-established. Consecutively keep working the next hand file size up 0.5-1mm short of the previous length to join your apical preparation to the coronal preparation (usually 3 file sizes)

If there is an abscess, uncontrolled bleeding, or weeping canals, dress the canals with non-setting CaOH for 2- 4 weeks and review for cleaning and obturation. There is no significant difference in outcome between single vs multiple visit RCT.

Flood the coronal aspect with Sodium Hypochlorite first to eradicate the majority of the bacteria. Then, Introduce a pre-curved size 10 K file to gently negotiate canals and flare upwards and outwards using size 2 and 3 GG bur in coronal few millimetres only.

Apex locator tip: Only the zero reading is accurate. Radiograph tip: if the file is at the radiographic apex, reduce length of file by 0.5-1mm (to the apical constriction). Current evidence suggests that apex locators are more accurate than radiographs because the constriction can be up to 3mm from the terminus in 50-98% of roots.

Using hand instruments, explore and negotiate the coronal two thirds and flush with NaOCI. Then, using hand or rotary NiTi files prepare and enlarge the coronal two thirds.

This can be achieved by hand or rotary filing. This is the **hand filing technique**.

- Reason for 3 file sizes larger:
- To remove dead pulp tissue, bacteria, and their substrates.
- To increase the capacity of the canals to retain a larger amount of irrigation agent.
- To prepare the canal for adequate obturation

Using a watch winding technique with no pressure (pressure-less technique). Wipe flutes throughout treatment on a sponge/gauze to stop clogging. File sizes larger than ISO 45 can be too stiff for use in molars.

66