

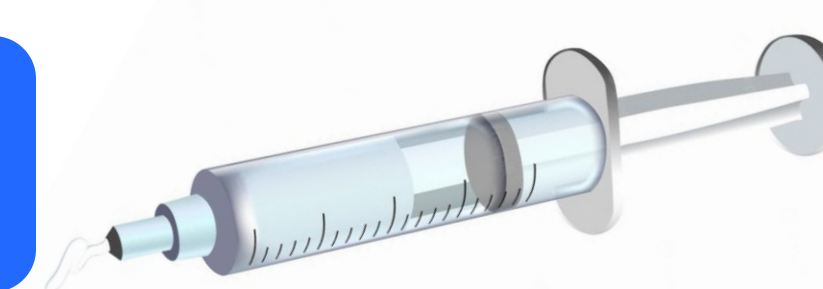
INTRODUCTION



- Following trauma to a tooth or RCT, discoloration can occur as excess blood leaves reddish and brown iron pigments which saturate the dentin
- Traditional bleaching techniques often don't work because the staining is on the inside"
- The most common causes for intrinsic tooth discoloration are intra-pulpal hemorrhage, pulp necrosis, medication induced, obturation materials and sealers, and metallic restorations placed



WALKING BLEACH TECHNIQUE

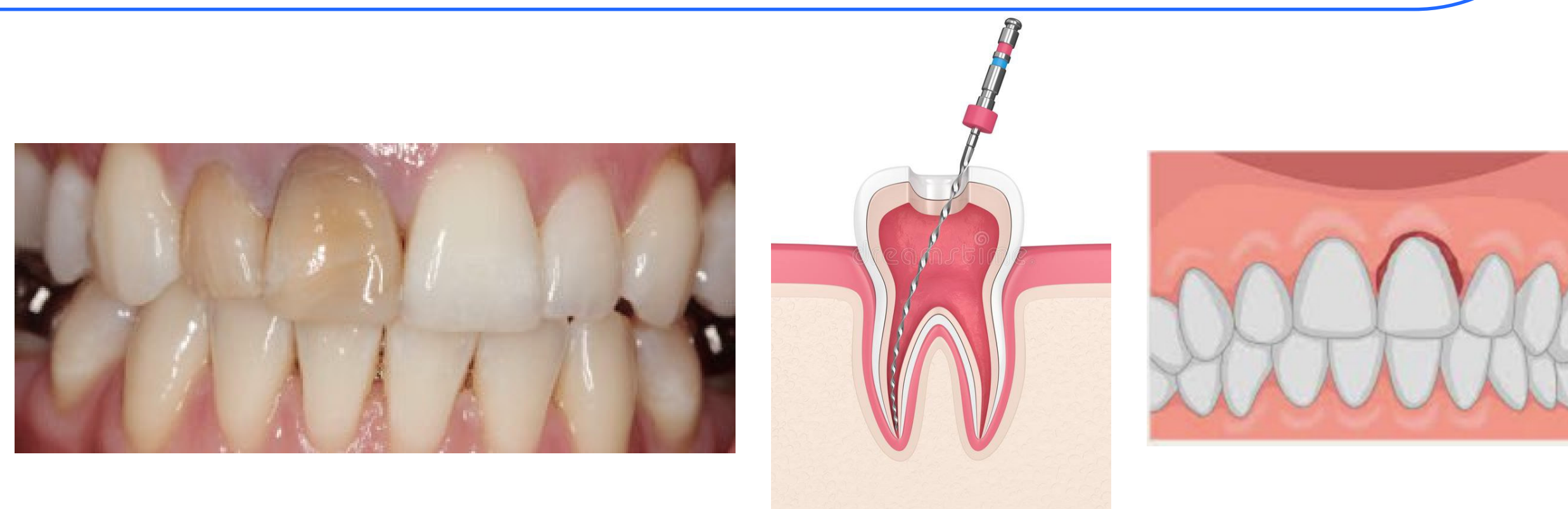


- The process of bleaching a tooth from the inside once endodontic obturation is complete
- Make sure the gutta percha has been removed to the level of the crestal bone (leaving gutta percha can add an orange cast to the root which will create an unwanted shadow)
- The bleaching agent most commonly used is sodium perborate with hydrogen peroxide as the wetting agent
- Sealing the tooth with a composite filling helps to eliminate the risk of bacterial contamination of the root canal space and leaking of the bleaching agents which can damage surrounding tissue
- First, etch the internal surface of the access at the margin so a temporary filling can be bonded
- Carry the bleaching agent to the tooth and used a condenser to fill the root canal space above the gutta percha
- Place a dry cotton pellet over the bleaching agent and seal with a resin and light cure
- Active bleaching occurs within 1 week and it may take 2-4 applications to get desired color-changing results
- Continue to monitor the tooth color and stop bleaching when the tooth matches adjacent teeth

PROS & CONS

Pros: simple and less invasive than restorative procedures including crowns and veneers, efficient and has predictable results

Cons: can take multiple appointments, possibility of cervical resorption due to acidic compounds

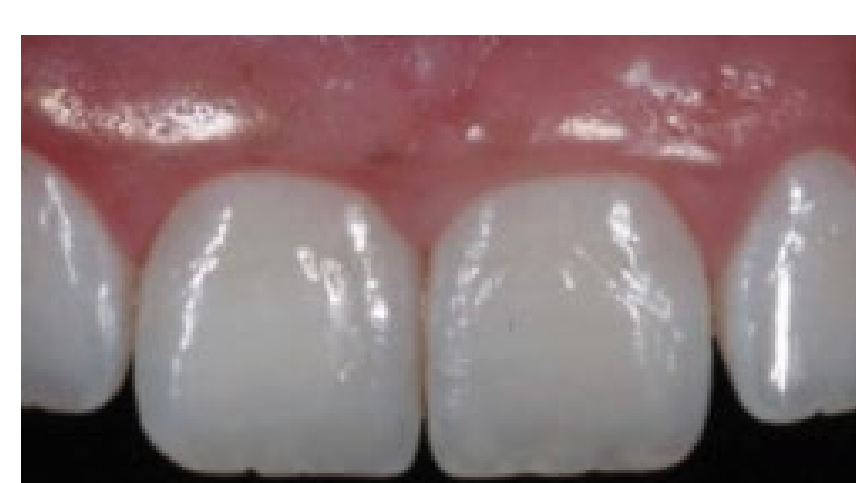


CLINICAL EXAMPLE

Before:



After:



- Tooth #8 presented with a fistula & darkening of the tooth structure
- The tooth was treated with root canal therapy
- Following RCT, internal bleaching with sodium perborate and hydrogen peroxide was done utilizing the "walking bleach" technique
- 1 week later, the tooth was polished and results were relatively immediate

CONCLUSIONS

- Internal bleaching offers an economical, effective and conservative solution for treating discolored teeth whether the discoloration be due to root canal interventions or trauma
- The bleaching agent used is similar to that of vital teeth whitening
- It is important to take precautions in order to reduce the possibility of cervical resorption following whitening treatment

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