INTERNAL WHITENING

Teeth can darken for a variety of reasons, one of the most common being external trauma.



When a tooth experiences trauma, the pulp becomes necrotic. Blood is released as a result of the subsequent inflammation. When the hemoglobin breaks down to iron sulfide, it stains the dentinal tubules black. Non-vital teeth often respond relatively well to external bleaching techniques, however, it is necessary in some cases to whiten the tooth from within the root canal system.

The full protocol is described here:

- 1 Internal bleaching is possible only after a root canal has been performed.
- 2 The pulp chamber must be cleaned with ultrasonic tips to remove all necrotic tissue, pulp and blood.
- **3** The gutta-percha is removed from the coronal portion of the pulp chamber to just beneath the level of the cemento-enamel junction. This should only be done after the endodontic cement has had a chance to fully set. It is advisable to use non-eugenol based endodontic cements as these inhibit the bonding of composite resins.
- **4** Resin-modified glass-ionomer should be used to seal the canal. Studies have shown that internal resorption can occur if bleaching products seep into the root canal space.
- 5 10% Boutique by Night (Carbamide Peroxide) should be introduced into the pulp chamber via syringe, and changed every 2 hours.
- 6 Alternatively, you can use a 16% carbamide peroxide and the same protocol as described above.
- 7 In more extreme cases, you can use the inside/outside technique whereby the above protocol is followed, but supplemented with a single tooth whitening tray, with gel placed buccally and palatally, throughout the process and overnight.
- 8 Most cases will resolve in 2 to 4 days, and you can continue to whiten as normal.