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TouchWhite® Teeth Bleaching

Dr. Nguyen Linhlan

Parameters:

Laser source:	Er:YAG 2940 nm
Mode:	VLP
Power:	0.75 W
Frequency:	10 Hz
Handpiece:	R16
Fluence:	0.2 J/cm ²

Treatment procedure:

A male patient in his late thirties suffered a sporting accident some fifteen years ago that left his upper left central incisor with necrotic pulp, which discolored after root canal therapy. The aim of treatment was to lighten the tooth color in preparation for a ceramic veneer.

Treatment: the palatal resin restoration was removed. The GP was removed to the cervical dentine level. A layer of GIC lining was placed to protect the cervical dentine. Clear hydrogen peroxide (35%) was used as the bleaching gel. The Fotona TouchWhite® protocol was used as the light source to activate the bleaching process.

Procedure: the gel was placed in the pulpal chamber and on the labial surface, and the laser beam alternatively activated the gel for 20 seconds on the labial surface then the pulpal chamber (three applications on each side). The gel then got washed off and replaced with fresh gel before repeating another three applications.

The discoloration subsided significantly after six activations. Before the session ended, a cotton pellet soaked with bleaching gel was placed in the pulp chamber. It was activated three times, each time for 20 seconds with 20 seconds rest in between activations. A temporary restoration was placed with the cotton pellet remaining in the chamber.

The treatment was reviewed after 18 days, showing a complete recovery. The palatal composite resin was placed and the tooth no longer needed a ceramic veneer.

There were many factors that contributed to this success, such as:

1. A high concentration bleaching gel with higher pH
2. The optimum level laser energy provided
3. Adequate removal of the lining/GP (to the cervical dentine)
4. Activated bleaching gel left in the pulpal chamber to continue working



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Fig. 1: Before treatment



Fig. 2: During treatment



Fig. 3: After 18 days