

Aesthetic management of fractured anterior teeth with dental fluorosis

Introduction

Tooth discolouration can be a significant aesthetic problem. Dental fluorosis, tetracycline staining, localised and chronological hypoplasia, amelogenesis and dentinogenesis imperfecta can all produce a cosmetically unsatisfactory dentition. Dental fluorosis is a specific disturbance due to chronic ingestion of excessive fluoride during the formative periods of the dentition. Depending on the severity treatment modalities include crowns, bleaching, ceramic or composite veneers and enamel microabrasion.

Traumatic injuries to the tooth are the third most common cause of tooth loss predominantly affecting the maxillary anteriors by direct or indirect trauma. Depending on the extent of tooth involvement the treatment plan is decided.

This case report explains the management of anterior teeth with moderate dental fluorosis and Ellis Class 2 fracture of maxillary incisors.

History:

An 18-year-old male patient reported to the department with the chief complaint of discoloured and broken upper anterior teeth. Patient had a trauma three months back resulting in the fracture of upper anteriors.

Treatment planning:

The treatment plan includes vital bleaching followed by direct composite veneering of teeth 13 to 23 after 1 week.

Case description:

Thorough Oral prophylaxis was done 1 week before the bleaching procedure. McInnes bleaching (hydrogen peroxide, hydrochloric acid and ethyl ether were used) of maxillary anteriors was done. Patient was recalled after a week; Shade selection was done and chosen as A2. After the placement of gingival retraction cord microabrasion of teeth from 13 to 23 was done. Labial beveling was done for 11 and 21. Acid etching was done with 37% Orthophosphoric acid for 15 seconds rinsed thoroughly and dried. GC Solare self-etch Universal Bonding agent was applied to the etched surfaces and light cured. Composite build-up was done incrementally. Palatal shelf was first fabricated for 11 and 21 followed by labial build-up of teeth 13 to 23. Finishing and polishing was done with Shofu Rainbow kit.

Conclusion- Restoring a patient's lost dental esthetical appearance is one of the main goals of dentistry in the anterior area. Direct Composite veneers can be a suitable solution for patients who want a more appealing smile. The direct veneering technique allows sculpting and creating beautiful and natural looking smiles in one visit, while being minimally invasive; this technique is also a financially attractive procedure for the patient.

PRE- OPERATIVE



1 week after bleaching



Micoabrasion



ETCHING



BONDING



COMPOSITE BUILD- UP



Final



BEFORE



AFTER



References

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