Case study:

Componeer-A case study

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Article info: Received: April 15, 2016, Accepted: April 10, 2016

Abstract

With the advent of new innovative system "Componeer", the conventional porcelain veneer and composite restoration in the field of aesthetic dentistry has become minimal now. The Componeer system grants superior aesthetics along with ease of handling, no or minimal preparation, single appointment, no psychological trauma to patient and last but not least is economical. This article describes management of stained teeth by recently introduced novel system "Componeer" on which there is paucity of literature.

Key words: Componeer, Dental Fluorosis

Background

The purpose of this article is to report a case of generalized fluorosis in a 23 year old boy with its management by noble, new, minimal invasive procedure involving recently introduced aesthetic material "Componeer".

Case Presentation

A 23 year old boy reported to our private dental clinic with a chief complain of ugly looking front teeth. On general examination, the boy was apparently healthy. There was no significant medical history. The patient gave history of his

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residence in Pratapgarh, (U.P, India) area where he used to drink hand pump drinking water. Intraoral examination revealed severe grade II (According to Nathoo's classification) fluorosis stains (Figure 1).



Figure 1: Severe Fluorosis stains.

The pulp vitality tests showed that all his teeth were vital with no abnormal mobility. On intraoral examination, it was observed that there were generalized stains involving incisal, middle and cervical areas of the teeth. A series of

Intra-oral periapical radiographs were taken to exclude any pathological sign. A provisional diagnosis of Fluorosis was made.

Investigation

- ▶ Pulp Vitality tests.
- ► Intra-oral periapical radiographical examination.

Treatment

Proper shape, size and colour of individual teeth was recorded and Componeer veneer was chosen the material of choice. The Componeer Contour and teeth size guide was used to determine the appropriate Componeer sizes. For eight upper and eight lower teeth. "L" size componeer was selected for the central incisors, "M" size for the lateral incisors, "L" size for canine and "M" size for premolar was chosen. (Figure 2)



Figure 2: Componeer contour guide.



Figure 3: Componeer Synergy D6 shade guide.

The White Opalescence shade of Componeer was selected and the dentine composite shade Synergy D6 White Bleach was chosen. (Figure 3)

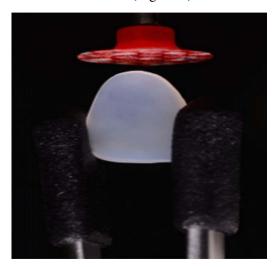


Figure 4: Trimming the prefabricated veneer with an abrasive disk.

Minimal preparation (0.2mm – 0.3mm) was done on labial surface of the tooth involving incisor edge. 35 % phosphoric acid was used to etch the teeth for 30 seconds. The One Coat (ColteneWhaledent, Switzerland) was then applied to the enamel surfaces and before light-curing for 10 seconds per tooth, transparent matrices were placed in the interdentally spaces. The Componeer were wetted with One Coat Bond and briefly blow-dried with air, but without lightcuring. White Bleach dentine composite was then applied to the fitting surface of each Componeer. (Figure 4)



Figure 5: Postoperative photograph of teeth after Componeer placement.

One by one, the Componeer were pressed onto the teeth surfaces using the Placer instrument, beginning with the two central incisors. Each Componeer was subsequently cured after alignment was corrected. Any peripheral defective areas were filled using Synergy D6 White Bleach dentine composite resin. The finishing was made by using finest finishing diamond points as well as flexible discs and strips. (Figure 5)

Outcome And Follow up

After 1 week, 3 months, 6 months and 1 year follow-up the patient was healthy and happy with his aesthetically treated teeth without complain of any stain and sensitivity.

Discussion

In the early 1980's, pre-fabricated acrylic veneers were introduced as mastique laminate veneer system. Mastique veneer shade limited success because of technological limitation sand poor surface qualities. Clinical studies have confirmed good performance of porcelain veneer restorations, with excellent aesthetics, overall patient satisfaction, and no adverse effects on the periodontal tissues. The main reason for its failure was fracture of the ceramic.

The clinical outcome of indirect veneer depends on the strength of two interfaces: the tooth/resin cement and the veneer/resin cement interface. A recent bond strength study reported that componeer prefabricated veneer resulted in microshear bond strengths statistically similar to those of etched IPS E maxpress.³

The novel clinical technique described in this paper has the potential for being used routinely to lengthen anterior teeth, to correct malpositioned teeth, to mask discolorations and to close diastema. The technique can be used to restore extensive carious lesions and tooth fractures and to refurbish large old anterior restorations especially when other treatment options are out of reach for the patient.

Learning Points

- > Simple in handling.
- ➤ No/ minimal preparation.
- ➤ Single visit.
- > Superior Aesthetic results.
- > Painless procedure.
- ➤ No local anaesthetic prick is required.
- > No laboratory work needed.

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