

Smile Make-over with Metal Free Ceramics : A Case Report

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Abstract

Smile makeover is a process where cosmetic dental procedures are performed on several front teeth in order to produce an overall change in appearance. It involves one or more cosmetic, dental or facial rejuvenation procedure to improve aesthetics of smile.

Keywords: Metal free crowns, smile makeover, zirconia,

Introduction

Today the option of using metal free ceramic materials gives the patient opportunity of demanding quality dentistry with excellent aesthetic results.

Smilemakeover generally deals with anterior 6 teeth (i.e. canine to canine), so in case of these it is usual to see that although the crown is aesthetic the replacement still does not give an impression of natural teeth. The reason behind is the metal substructure within it that makes its translucency less than that of natural tooth thus giving them an artificial appearance. This problem can be easily solved by using metal free ceramic crowns. This metal free translucent crown remains unnoticeable even to an expert eye from 5 to 10 cms.

Case Report

A patient aged 50 yrs reports to my clinic with a prime motive of enhancement of his



appearance which was badly harmed by his protruding maxillary anteriors with spacings and loss of all 4 mandibular anteriors.(fig.1 & 2)



Apart from rehabilitation of the lost teeth his main concern was reproduction of an aesthetic facial appearance with properly aligned teeth.

Oral examination showed that tooth 22, 31, 32, 41, 42 were missing. 11,12 and 22 were proclined labially thereby greatly increasing the overjet. The mandibular canines were also labially proclined. The mandibular labial frenum was high and prominent. The patient had a non contributory medical history and was not taking any medication associated with compromised healing.

The treatment plan was explained to the patient and an informed consent was obtained from him.

Taking into consideration all the aspects it was decided to proceed with maxillary teeth first. The patient's impression of both the arches were taken and was given antibiotics for 2 days. On the third day tooth 11,12 and 21 were extracted followed by immediate removal partial dentures replacing tooth 11, 12, 21, 22 and 31, 32, 41, 42.

The patient was recalled after 60 days for examination.oral examination then

showed that the tissues were healed and healthy. so I decided to begin with crown preparation of maxillary right and left canines for a six unit zirconia metal free bridge. As the canines were in protrusion there were chances of pulp exposure from the labial surface as we have to reduce more from labial surface in crown preparation to achieve proper alignment of bridge, so a single sitting root canal treatment was done in both the canines (fig. 3).shade selection



has been done .the rubber base impressions were taken after 2 days & the models were sent to lab for fabrication of metal free bridge. After one week the maxillary metal free bridge was delivered (fig. 4).



After three days lower canines were prepared .labial proclination of these also necessitated the need of single sitting root



canal treatment (fig. 5). The rubber base impression were taken after 2 days .as the



mandibular labial frenum was prominent it was decided to releve the frenum space in the coping prior to the fabrication of bridge. The trial of coping was done (fig.6). Then



the coping was sent back to lab. The final bridge was then delievered after 3 days (fig.7). The patient was very happy as his overall appearance was drastically changed and he fell more confident with his new smile (fig 8 & 9).

Discussion

This report shows successful replacement of anterior teeth using metal

free bridges with a satisfactory smile makeover. It helped to rebuilt the patients smile and esthetics with an uncompromised natural appearance.



These metal free bridges are completely non-metallic,highly biodegradable,

naturally aesthetic and translucent, non-allergic,tissue friendly, fracture and wear resistant.

With advances of metal free bridges the visible metallic edges of grey metal ceramic crowns belong to the past.

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Legends

- Fig. 1 : pre operative photograph
- Fig. 2 : pre operative photograph
- Fig. 3 : maxillary canine crown preparation photograph
- Fig. 4 : maxillary bridge delievered
- Fig. 5 : mandibular canines crown preparation
- Fig. 6 : mandibular coping trial
- Fig. 7 : mandibular bridge delievered
- Fig. 8 : post operative photograph
- Fig. 9 : post operative photograph

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