CASE REPORT

Comprehensive and esthetic rehabilitation for phobic patient “case report”

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Abstract  Background: One of the main reasons for a patient to be referred for sedation in order to receive dental treatment is dental fear. Minimal Invasive Dentistry is caused by the ceramic material improvement along with luting composites ceramic and well secured to teeth. Modern society considers a lovely smile being the perfect image for beauty and great health.

Case details: A 24-year old phobic patient Male presented to the clinic, with a chief complaint of an unaesthetic smile. We end up by excellent management of phobic patient and complete comprehensive and esthetic treatment and the patient was highly satisfied with the results.

Conclusion: Successful management of a fearful patient during the first visit build good patient dentist relationship thus completing comprehensive dental treatment.

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1. Introduction

One of the main reasons for a patient to be referred for sedation in order to receive dental treatment is dental fear (Appukuttan et al., 2015). Nowadays the dentistry clinical practice has gained major improvements in terms of technologies, material used and new techniques as well as better infection control procedures when compared to decades ago (Caltabiano et al., 2018). Although there is no change in today’s dentistry treatment objectives in relation to the form restoration and function, the patient’s demands on quality and esthetics have increased significantly (Heinlein, 1980; McLean, 1980). Additionally, it is invisible to the patient how the modern material used and adhesive techniques innovated and improved dentistry (Magne et al., 1999, 2002). Minimal Invasive Dentistry is caused by the ceramic material improvement along with luting composites ceramic and well secured to teeth (Simonsen, 1987; Tyas et al., 2000). Modern society considers a lovely smile being the perfect image for beauty and great health. The anterior teeth’s appearance tend to have a strong emotional impact on the patient (Cairo et al., 2012). Number of factors influences the aesthetics including but not limited to the position and form of teeth, crown ratio in terms of tooth’s width and length, dental midline, smile line, incisal embrasures, gingival tissue levels, symmetry of contralateral gingival margins as well as gingival display. Recently ceramic has been the primary restorative material being used in
the treatments of veneer due to the fact that ceramics are highly exhibited wear resistance and biocompatible with great stability of color (Gurel et al., 2013). On the other hand, the main disadvantage of ceramic is its exceptional hardness and brittleness in relation to tissue for the dental relating to this restorative materials class. Another significant disadvantage of ceramic is its high cost where it may stop patients from retrieving such treatment (Albuquerque et al., 2018).

2. Case report

A 24-year old phobic patient Male presented to the clinic, with a chief complaint of an unaesthetic smile. He was concern about discolored anterior teeth. Intra oral examination revealed that the patient had inflamed gingiva, all his upper anterior teeth were restored with faulty restoration and deep recurrent caries as seen in Fig. 1.

Tooth #17,16,21,45 was previously root canal treated (sub-standard) with asymptomatic apical periodontitis, he also had multi defective restoration in all his mouth as seen in Fig. 2. Peri-apical X-ray for tooth #21 shows short metal threaded post as seen in Fig. 3. So, comprehensive and esthetic treatment was planned.

First, initial phase consists of supra gingival scaling with oral hygiene instructions. Patient was recalled after four weeks to assessed the gingival health improvement. The gingiva was healed and no bleeding on probing. Furthermore, composite restorations were done as simple, compound and complex for multi teeth.

The obvious challenge in this case was how to restore severely damage tooth#21 after removing old metal threaded post as seen in Fig. 4. Root canal treatment was carried out in all his incisors, #26 as irreversible pulpitis, and root canal retreatment in this case was performed in #17,16,45.

Tooth #21 with greatest loss of coronal tooth structure was judged to be a candidate for gold cast post-and-core restoration as seen in Fig. 5. Usual tooth preparation was carried out to fabricate all ceramic crowns in all the endodontically treated teeth and veneers for the upper canines as seen in Fig. 6.

There was tooth #35 none-restorable, we extract it and replace it with implant and screw retained crown.

We end up by excellent management of phobic patient and complete comprehensive and esthetic treatment and the patient was highly satisfied with the results as seen in Fig. 7.
3. Discussion

Treating fearful patients firstly require establishing a strong relationship based on trust and being professional. Comprehensive care is achieved through proper explanation for the procedures and patient education. Patients could relive anxiety and could share their needs through creating a comfortable environment through making them aware for your concern and non-judgmental questions are being asked. Ultimately, planning patient’s treatment should match the level of their comfort in order to have significant progress. Multiple techniques are now possible for anterior restorations. The preparation for tooth’s design could be extensive in case of total crown or minimally invasive in case of veneers. In spite of the difference in treatments for both crown and veneer, all need several laboratory and clinical steps to be taken (Albuquerque et al., 2018).

In the present case the primary challenges were:
1. Patient fear, 2. Severely damage anterior teeth, 3. Need to align the upper anteriors according to the arch form, 4. Non-surgical and non-orthodontic treatment plan.

Diagnostic wax-up often shows the final impression of the teeth shape and performs as dynamic visual and functional aids in achieving better outcomes. visualizing and planning the final results utilizing diagnostic wax-up was beneficial tool in the management of the case (Heinlein, 1980; McLean, 1980).

Furthermore, involved patient to visualized the projected result before an elective esthetic treatment is recommended. Our role in patient education to explain the procedure limitation has a major impact in the decision making process and satisfy result (Albuquerque et al., 2018).

In the present case, it has been found that the final estimation for the width and length of the maxillary anterior is extremely essential during the procedure of the diagnostic wax-up. Lombardi managed to explain that the dimensions proportion for the width and length of each individual tooth with its respective anterior tooth size is very important in order to complete a successful procedure. Hence, it is recommended to obtain a width to length ratio of 80%. Ultimately, if the width to length ratio is higher, the tooth would be squarer. Whereas if the width to length ratio is lower, the tooth appearance would be longer and slender (Lombardi, 1973) It has been reported by Tronstad L et al. that all teeth received endodontic treatment are exposed to fractures more than others due to substance loss from the increased strain where the pulp removal has nothing in relation to it. Thus, crowns with full coverage are able to restore any damaged teeth (Tronstad et al., 2000). In this present case, a gold cast post placement and core, fiber post, crowns as well as veneers are required in order to obtain an esthetically pleasing smile.

4. Conclusion

Successful management of a fearful patient during the first visit build good patient dentist relationship thus completing comprehensive dental treatment. Ideally, before initiating treatment, an aesthetic assessment is essential to achieve the best outcome.

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Conflict of interest

The authors have no conflict of interest to declare.

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Fig. 6 (A) Shows Right lateral view after treatment, (B) left lateral view, (C) upper occlusal view, (D) lower occlusal view, (E) frontal view.

Fig. 7 (A) Before starting treatment, (B) after complete comprehensive and esthetic treatment.