

Full Mouth Rehabilitation, Multidisciplinary Approach – A Case Report

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Abstract

Often, complex clinical situations are encountered that require a multidisciplinary approach to establish a complete solution. Rehabilitation of patients presenting with collapsed occlusion or loss of vertical dimension of occlusion is an example of this. This case report describes the full mouth rehabilitation of a 63-year-old patient who presented with severely worn teeth, resulting in a reduced vertical dimension of occlusion. It demands careful assessment of the periodontium as well as the entire dentition from both endodontic and restorative perspectives. Re-establishing the precise vertical dimension of occlusion and ensuring the supporting periodontium is healthy are of paramount importance for a successful outcome of treatment.

Keywords: Ceramic restorations, Crown lengthening, Endodontic treatment, Moderate periodontitis.

INTRODUCTION

With lifetime use of dentition and some deleterious effects of bad habits, the teeth lose their occlusion dimensions secondary to severe attrition. Although losing the vertical dimensions is a continuous process, it is at a very slow pace, a few micrometers per year. However, secondary to a few habits such as betel nut chewing or secondary to acidic drinks, the rate of wearing considerably increases. Severely worn occlusion surfaces pose different issues, such as TMJ arthritis, myocardial pain, inability to masticate, etc.^[1] In addition, coexisting issues such as periodontitis, caries, add to the treatment planning for restoring functional occlusion.

This clinical report describes a case presented with multiple mobile teeth, endodontically infected teeth, and moderate periodontitis combined with lost occlusion.

CASE REPORT

A 63-year-old male reported to the clinic with the chief complaint of difficulty in chewing food. Additional complaints were occasional pain experienced with multiple teeth and poor esthetics. The patient had a medical history of diabetes mellitus, hypertension, and was addicted to pan masala chewing and alcohol. Intraoral examination revealed a generalized loss of the occlusal table with exposed pulps of multiple teeth [Figure 1].

In addition, three teeth, maxillary right premolars and mandibular left premolars, were mobile due to endoperio pathology. Those teeth were ultimately removed, and treatment was planned for the correction of periodontitis and restorations.

In vivo crowns in posterior teeth with both arches were constructed, and an average interocclusal space of 2 mm was achieved. In the trial phase, the patient was observed for 2-week periods. When it was assured that the achieved occlusal plane was trouble-free, entire arches were taken for restoration. The split arch method was used. Clinical crowns were built using composite resins and then prepared to receive porcelain-fused-to-metal crowns in anterior regions and full metal crowns in posteriors. With all the teeth, margins were placed at the gingival level. Final prosthesis depicted nice Class I occlusion in molars and satisfactory overjet and overbite in the anterior. Jaw collapse was reversed, and drooping commissures were

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eliminated. Sooner in the week's time, TMJ discomfort and myalgia also reduced significantly [Figure 2].

DISCUSSION

Full mouth rehabilitation poses a challenging situation that demands careful analysis of the case and meticulous treatment planning and execution. It is the total restructuring of the dental apparatus. It needs the right sequencing of various treatments to establish a functional dentition.

Turner and Missirlian^[1] classified the treatment of a severely worn dentition. His conventional treatments included raising the occlusal dimension, and multiple crown lengthening procedures have been widely practiced. In this case, vertical occlusal dimensions were re-established using *in situ* constructed composite crowns and then observing for adaptability. When it was assured after 2 weeks that the newly established interocclusal clearance of 2 mm was comfortable and functional, a split arch approach was decided to place the prosthesis. Posteriors were replaced by full metal crowns, and anteriors by porcelain fused to metal.^[2-5] Depending upon challenges and needs, various modifications are to be undertaken as dictated by the case. In this case, four extractions, 17 root canal treatments, and crown lengthening were undertaken with molars.^[6] As per the availability of clearance, it was decided to go for metal crowns. The final prosthesis gave a clinically and functionally satisfactory dental apparatus to restore lost masticatory function and facial height, diagnosed with a pocket depth of up to 5 mm and the presence of bleeding upon probing with many teeth. Local irritants were observed in the form of supra as well as subgingival calculi. Moderate gingival inflammation was noticed with bleeding upon the slightest provocation. The patient also complained of frequent TMJ pain after eating.

Determination of centric position

The patient was guided to assume a rest mandibular position, and then the interocclusal space was measured. It was up to 6 mm in the posterior region. When asked to close the jaw in centric relation, the patient exhibited a severe deep bite as well as an anterior edge-to-edge bite. The increased interocclusal rest space was a clear indicator of severely worn teeth, and the deep bite caused drooping commissures around the mouth. Betel nut chewing, tobacco chewing, and acidic drinks collectively contributed to the severe enamel erosion.

Furthermore, nearly all teeth presented with exposed pulps. Among the present 28 teeth, four premolars – two maxillary right and two mandibular left – were extracted. Out of the remaining teeth, 17 were endodontically treated. Mandibular molars on both sides exhibited severely compromised vertical health height.

Examination and treatment planning

At the beginning, all clinical records were made with full mouth radiography, and also both maxillary and mandibular casts were made. Interocclusal space at rest was measured, which



Figure 1: An intraoral photograph depicting lost occlusal height



Figure 2: Post-operative picture

was on average 6 mm posterior. Vertical dimension alterations were assessed by various aspects.^[7]

Periodontal examination was conducted to record pocket depths and mobility. A diagnosis of moderate periodontitis^[8] was established based on the average pocket depth (<5 mm) and presence of inflammation. Endodontic assessment was performed using intraoral periapical radiography. It revealed periapical infections in all posterior teeth and severely decayed maxillary right premolars. During the treatment phase, extractions were followed by appropriate periodontal therapy. Full mouth subgingival scaling, root planing, and subgingival curettage resulted in satisfactory periodontal health with complete resolution of inflammation. After periodontal treatment, an endodontic phase was undertaken, during which root canal treatments were completed on all posterior teeth, followed by crown lengthening to achieve adequate clinical crown heights. In the occlusal correction phase, trial restorations were made using light-cure composite resin.

CONCLUSION

Full mouth rehabilitation is a carefully coordinated effort involving different dental specialties, sometimes requiring case-specific modifications. Meticulous execution provides a rewarding functional and esthetic outcome.

REFERENCES

1. Turner KA, Missirlian DM. Restoration of extremely worn dentition. *J Prosthet Dent* 1984;52:467-74.
2. Prasad S, Kuracina J, Monaco EA Jr. Altering occlusal vertical

- dimension provisionally with based metal onlays: A clinical report. J Prosthet Dent 2008;100:338-42.
3. Brown KE. Reconstruction considerations for severe dental attrition. J Prosthet Dent 1980;44:384-8.
 4. Sato S, Hotta TH, Pedrazzi V. Removable occlusal overlay splint in the management of tooth wear: A clinical report. J Prosthet Dent 2000;83:392-5.
 5. Davis NC. Smile design. Dent Clin North Am 2007;51:299-318.
 6. Hempton TJ, Dominici JT. Contemporary crown-lengthening therapy: A review. J Am Dent Assoc 2010;141:647-55.
 7. Kar AK, Prakash H, Jain V. Full-mouth rehabilitation of a case of generalized enamel hypoplasia using twin-stage procedure. Contemp Clin Dent 2010;1:98-102.
 8. Tonetti MS, Greenwell H, Kornman KS. Staging and grading of periodontitis: Framework and proposal of a new classification and case definition J Periodontal 2018;89:S159-72.