Management of a Partially Edentulous Patient with Bilateral Mandibular Tori - A Case Report

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Abstract

Conventional cast partial dentures become only theoretical success in most of the elderly patients, especially with some kind of bony prominences. In such cases flexible dentures offer a comfortable and affordable option. It was long thought that removable partial dentures had to be rigid but with innovation of flexible dentures, flexibility combined with strength and light weight provides total comfort and great looks. Features of these prostheses are, 1) Good Retention, 2) Aesthetically superb and virtually invisible, 3) Excellent strength, 4) Easy in handling, 5) No involvement of metal, 6) Non invasive procedures, 7) Comfort. This case study shows that the patient with bilateral mandibular tori can be treated easily and comfortably with Flexible partial dentures.

Key Words: Flexible Denture, Mandibular Tori, FPD, etc.

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Introduction:

A smile with a missing tooth, replacement a must and it becomes best if a denture patient wearing is comfortable and affordable. It was long thought that removable partial dentures had to be rigid but with innovation of Flexible Dentures, flexibility combined with strength and light weight provides total comfort and great looks. When considering a removable partial denture, many people find Flexible partial to be most comfortable option. While the cost is often higher than a partial made with visible metal clasp, the results are beautiful and patient satisfaction is high. Flexible partial involves only non invasive procedures and gives patients confidence in their restoration while talking, eating and most importantly Smiling……..

Flexible partial dentures: As it is a tissue supported dentures, it does not require any other metallic components like rests, direct/indirect retention for added retention. This makes it non-invasive procedure, less time consumption for fabrication, virtually invisible and also provides optimal retention(1). It is also very thin and light weight. Economically it is affordable.

Case Report:

A 55 yr. old female patient with bilateral mandibular tori present used the conventional acrylic partial denture. The denture was uncomfortable to wear and functionally inefficient. Patient refused to wear ordinary acrylic denture (a space maintainer) or even
a cast partial denture because of discomfort caused due to her tori present. This caused the long term almost eight years of partial edentulism.

Primary models were prepared and the areas of both right and left side tori were relieved and special trays were made. Impressions of both arches using irreversible hydrocolloid (Neocolloid) were made and cast using dental stone (Fig 1.)

Bite registration was done by using normal modeling wax, teeth arrangement and try in were done as in conventional techniques.

Lab Procedures: Injection Moulding Technique was used for fabrication. An industrially polymerized thermoplastic resin (Lucitone FRS) which increases the resistance to fracture and compatible to artificial teeth was used and processed at 260° C. Trimming of the denture was done using Silicone Burs.(Fig 2 and 3)

Insertion: Before the insertion the flexible partial dentures were placed in very hot water for 1 minute. A very smooth insertion and excellent adaptation to natural tissues of mouth was found. As shown (Fig. 4) flexible denture has no metal band and gets natural appearance.

Maintenance of Prosthesis: Patient was instructed to clean her appliance regularly. She was instructed to soak the appliance in water for 10-15 minutes a day or overnight at least 3 times a week in the commercial denture cleanser. All the loose particles can be removed with use of sonic dental cleaner or by placing it under running water. If possible, rinse the appliance after eating to remove any food particles.
She was also instructed to keep the denture in water or in denture cleaner whenever it is not been worn to keep the surface hydrated.

**Discussion:**

Conventional cast partial dentures (Fig 5) are virtually visible and unappealing due to various metallic components used in its fabrication(2).

![Fig 5 Conventional cast Partial denture](image)

Another important factor is that tooth structure is affected when tooth needs to be prepared for direct/indirect retention and also at times it gets abraded by the impinging metal clasps. Some patients even are allergic to monomer and metal which limits its usage. Above mentioned factors also make it uncomfortable to wear and may not give good retention qualities(3).

Usage and fabrication of several components like rests, direct retainers, indirect retainers, minor connectors of cast partial dentures makes the job difficult and also increases chair side as well as laboratory time. It is also relatively expensive. Other factors include the same as for conventional acrylic dentures like poor aesthetics, tooth preparation etc.

War of CONCEPTS: Rigidity V/S Flexibility

It was long thought that removable partial dentures had to be rigid to be effective, but the innovation of flexible partials allows the restoration to adapt to the constant movements and flexibility in your mouth. Flexibility Here Means Adjustability(4).

Flexible denture adapts to the oral tissues with utmost ease. It hooks into the undercuts. We also have the freedom to make the same adjustments as in rigid partials(1).

**Drawbacks:**

Bulk of the resin is required for the teeth to adapt to the base. Fungal growth has been found around the restoration in few cases. Few cases have reported allergic reactions on mucosa. The restoration takes up stains in due course of time; thus requires adequate maintenance. As structure and condition of patient's mouth changes over time relining can be done(5).

**Conclusion:**

Metal is past; Flexible is PRESENT and the need of the FUTURE. In patients with tori where conventional modes of treatment fail to deliver desired results, flexible dentures have given very good results where the patients can not only chew their food but are also comfortable when they use these prosthesis.

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