

Pre-Orthodontic Restorative Dental Treatment Approach in Adult Patients: A Case Report

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Introduction:

Fixed orthodontics increases caries risk in children and adults. Literature mostly addresses caries prevention immediately prior and during orthodontic treatment.

Aim:

The aim of this report is to demonstrate a pre-orthodontic restorative treatment approach.

Case:

35-year old man presented to the clinic requesting dental treatment. Diet history revealed high frequency and duration of exposure to sweetened foods and beverages. He had poor oral hygiene and inadequate fluoride exposure.

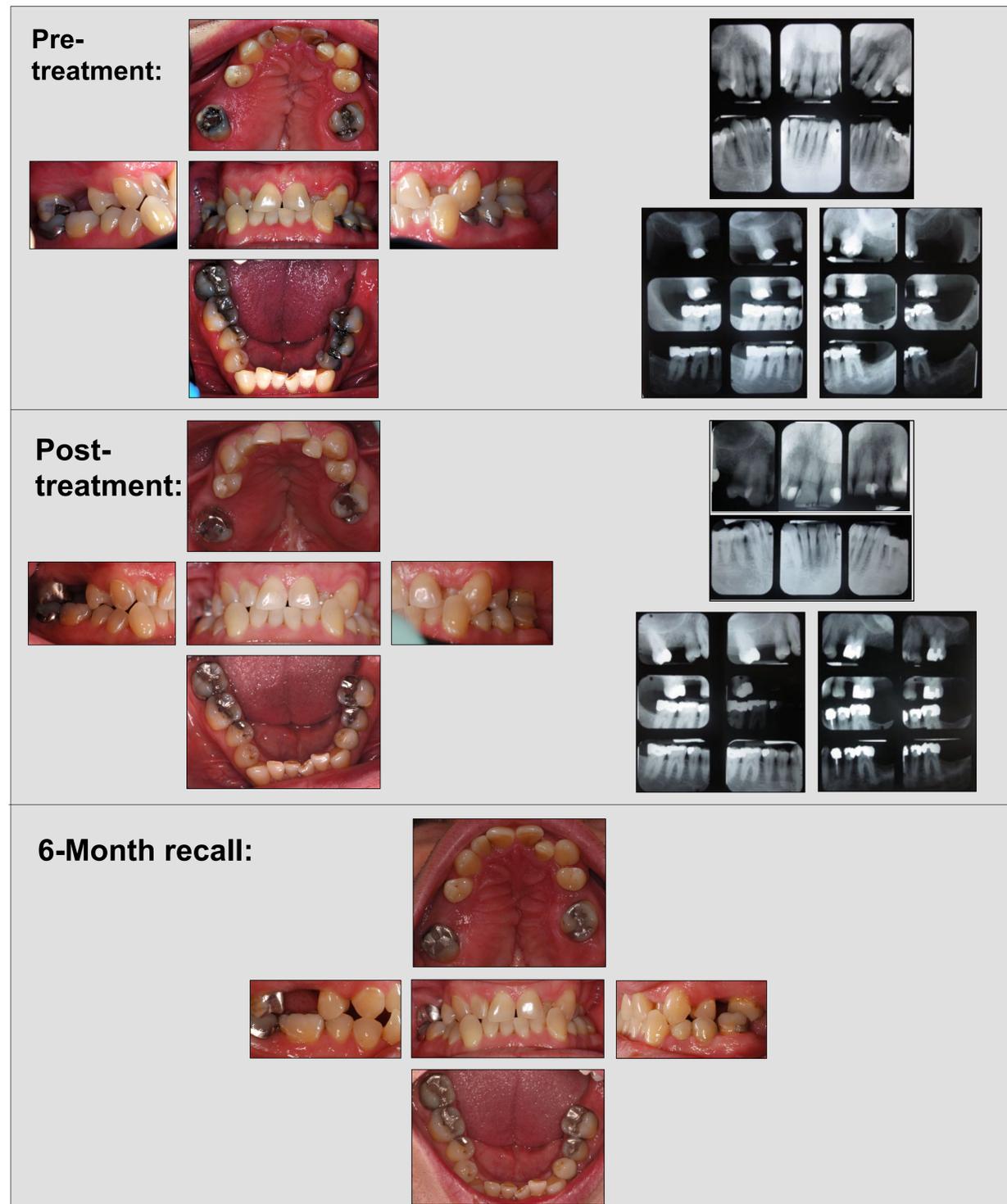
Intraoral and radiographic examination revealed:

- Multiple cavitated caries lesions, secondary caries lesions and incipient caries lesions.
- Multiple missing teeth that were extracted due to caries.
- Malocclusion.

Treatment of this high caries risk patient was performed in three phases to establish good oral hygiene and dietary habits, restore and manage carious lesions.

In the first phase:

- Dietary adjustments, reducing Soda and sugary substances, switch to diet soda or water.
- A full mouth clean and polish.
- A professional fluoride application every 2-3 weeks for 3 months was started and combined with fluoridated tooth paste for home use.
- Caries excavation and placement of temporary fillings.



Case- continued:

After re-evaluation of periodontal status and the oral hygiene compliance of the patient, adequate improvement was noted.

In the second phase:

- RCT of tooth 34.
- Re-reinforcement of OHI and dietary instructions.
- Fluoride regimen continued.

In the third phase:

- Final restorations composite restorations.
- Amalgam build-up in severely destroyed teeth.
- Long-term provisional PFM crown on tooth 34.
- Fluoride application on incipient lesions and fluoridated tooth paste with OTC fluoridated mouth rinse.
- Re-evaluation of treatment measures and patient's compliance and reinforcement of OHI with emphasis on upcoming orthodontic treatment.

Recall after 6 months revealed:

- Greatly improved OH and continued compliance of the patient with dietary instructions.
- Re-reinforcement of OHI
- Prophylaxis
- Patient started orthodontic treatment directly after this recall visit
- Regular checkups and the use of fluoridated mouth wash was also recommended for the orthodontic treatment phase.

Discussion and Conclusion:

A pre-orthodontic restorative treatment in combination with a prophylaxis regimen is suggested to reduce the risk of developing caries lesions during orthodontic therapy of high caries risk patients.