



# Comprehensive Case Presentation

Presented by :  
Dithar Bubteina  
Roll num. : 899

5  
4  
3  
2  
1

## □ Clinical Examination :

### 1. General appraisal :

Normal body built, gait, posture, mental status, and speech

### 2. Extra-oral Examination :

- ✓ 1-Face symmetry : symmetrical.
- ✓ 2.Skin : Normal color, no scars.
- ✓ 3.TMJ : Average mouth opening, No tenderness, No clicking, deviation or dislocation detected.
- ✓ 4.Lymph nodes : Not palpable.
- ✓ 5.Lips : competent, mid lip line.
- ✓ 6.Dental relation to facial mid line : coinciding.
- ✓ 7.Face form : Ovoid.
- ✓ 8.Facial profile :

# 3. Intra-oral Examination

## ➤ Soft Tissue :

Halitosis : Absent

Oral mucosa : Normal

Palate : Normal

Tongue : Normal

## ➤ Hard Tissue :

Wasting Diseases of teeth : **Present** (Attrition)

Crowding : **Present**

Recession : **Absent**

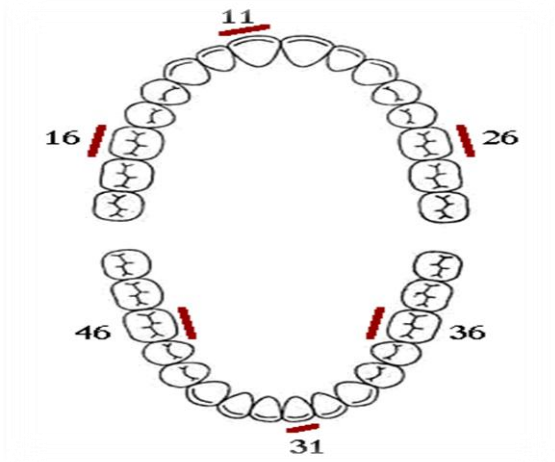
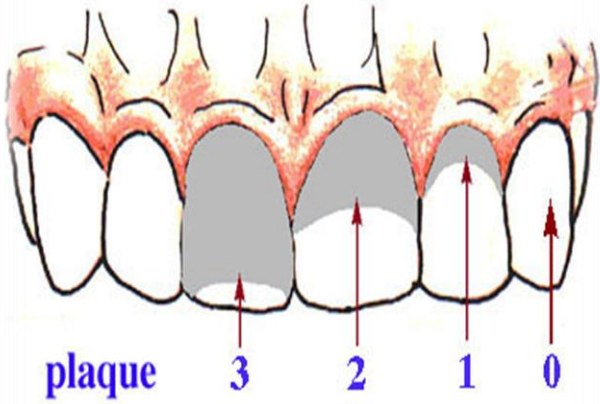
Loss of Proximal Contact : **Present**

Furcation Involvement : **Absent**




# Oral Hygiene Index - Simplified :

<b>16</b>	<b>11</b>	<b>26</b>
2	1	1
2	2	2
<b>46</b>	<b>31</b>	<b>36</b>



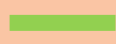
<b>16</b>	<b>11</b>	<b>26</b>
1	1	0
1	1	1
<b>46</b>	<b>31</b>	<b>36</b>

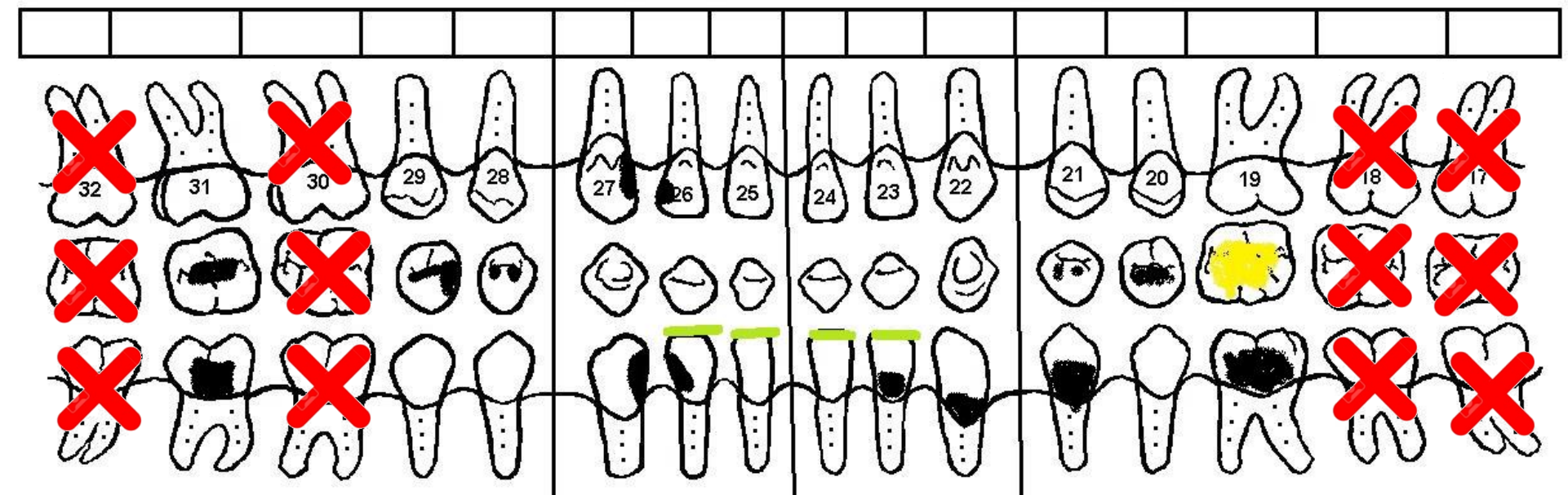
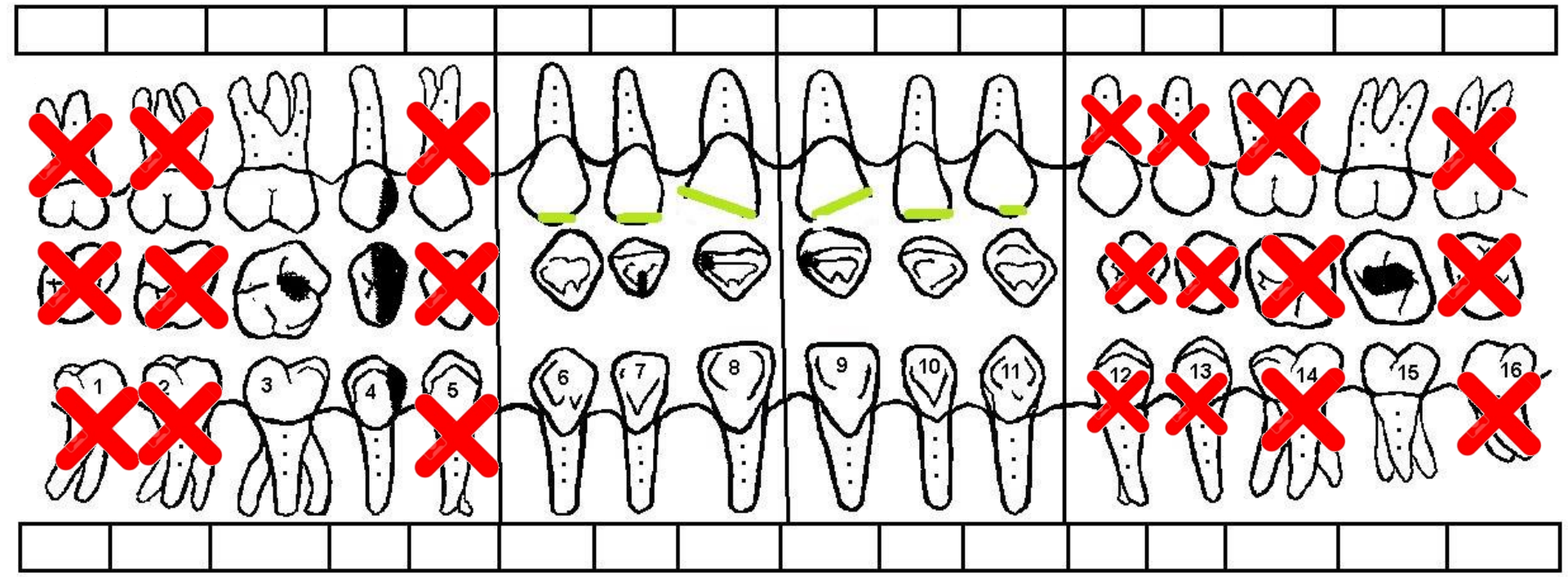
OHI = fair (2.5)

 Extracted or Missing

 Restoration

 Caries

 Tooth substance loss



DMF index  
= 23

# Gingival Status

- Gingiva :

- ✓ Reddish pink.
- ✓ Round margins with blunt IDP.
- ✓ soft and edematous.
- ✓ No enlargement.
- ✓ bleeding on probing is present.(all quadrants )
- ✓ no exudation.
- ✓ Stippling is absent.

- Frenal attachment : Normal.

- Fermitus test : -ve.

- attached gingiva : Adequate.

# Periodontal Status

- LOA : 2-3 mm

- **Diagnosis :**

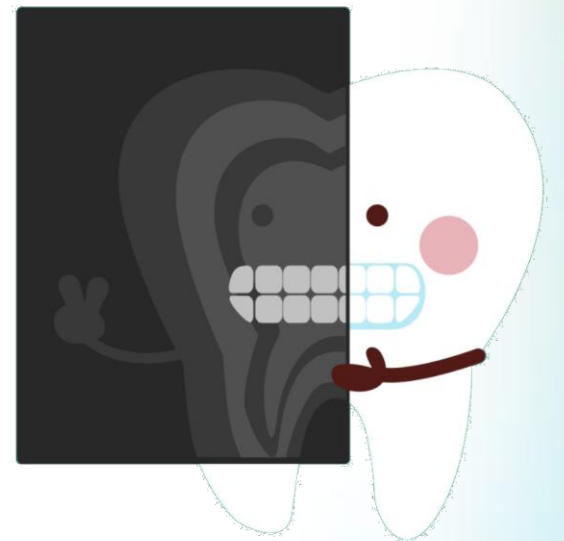
- Generalized mild to moderate chronic periodontitis

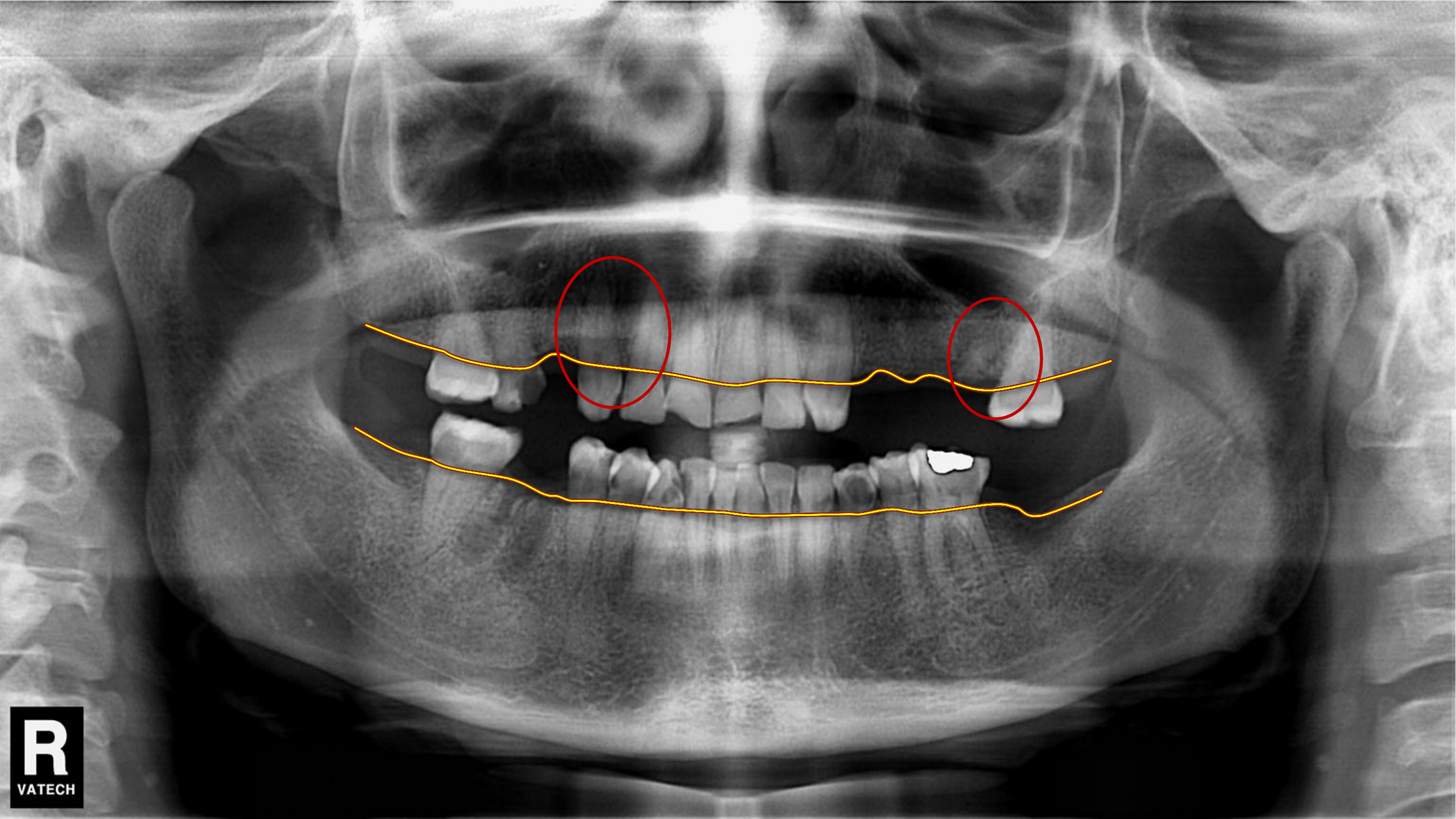
- **Overall prognosis :**

- Fair.

## Investigations :

1. OPG ( Orthopantomography )
2. Vitality test ( Electrical ) (11) (21)
3. IOPA (Intra-oral Peri-apical Radiograph  
(11) (21) (15))







# Panoramic radiograph



Panoramic view  
Showing :

1. Maxillary and mandibular teeth with generalized mild to moderate bone loss
2. Partially edentulous jaws / Multiple missed teeth (18) (17) (14) (24) (25) (26) (28) (38) (37) (46) (48)
3. Radiolucency related to crowns of (15) (34) (42) (43) (45) indicating carious lesions
4. Radiopacity related to (26) indicating remaining root
5. Radiopacity related to crown of (36) indicating restoration

# IOPA Radiograph :

(13)



(11) (12)

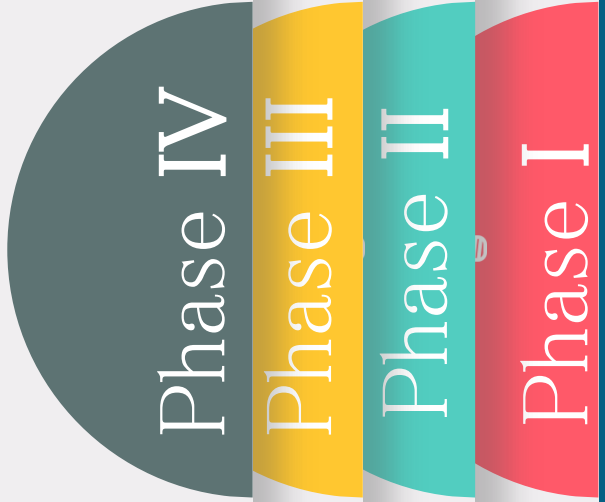


(15)



# Final Diagnosis :

1. Generalized mild to moderate chronic periodontitis
2. Dental caries (16) (11) (12) (21) (13) (27) (36) (35) (34) (32) (42)  
(43) (44) (45) (47)
3. Fractured teeth (11) (21)
4. Badly destructed tooth structure due to caries (15)
5. Multiple missing teeth (18) (17) (14) (24) (25) (26) (28) (38) (37)  
(46) (48)



TREATMENT  
PLAN

# Phase I / non - surgical / etiotropic

1

Patient education and motivation toward the importance of oral hygiene and plaque control

2

Oral hygiene instructions

3

Supra and sub gingival scaling and root planning

4

Active caries control

5

Diet control

Phase IV

Phase III

Phase II

Phase I

Re-evaluation of phase I !

# PHASE II / SURGICAL PHASE

Phase IV

Phase III

1

**Gingivectomy**

2

**Extraction of remaining root**

Phase II

Phase I

# PHASE III / RESTORATIVE PHASE

Phase IV

- **Final restoration** (16) (13) (27) (36) (35) (34) (32) (42) (43) (44) (45) (47)
- **Root canal treatment** (15) (45)
- **Fixed prosthetic reconstruction of severely destructed tooth** (15)
- **Replacement of the missed teeth with upper Kennedy's class III modification 1 Removable Partial Denture And lower Kennedy's class II modification 1 RPD**

Phase III

Phase II

Phase I

# PHASE IV / MAINTANANCE AND RECALL

Periodic recall and rechecking every 3 months for the 1st year, then after every 6 months



Phase IV


Phase III

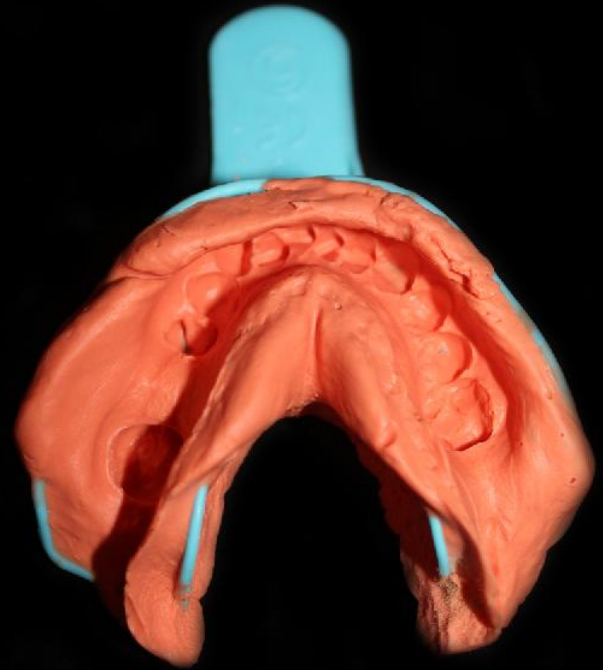
Phase II

Phase I



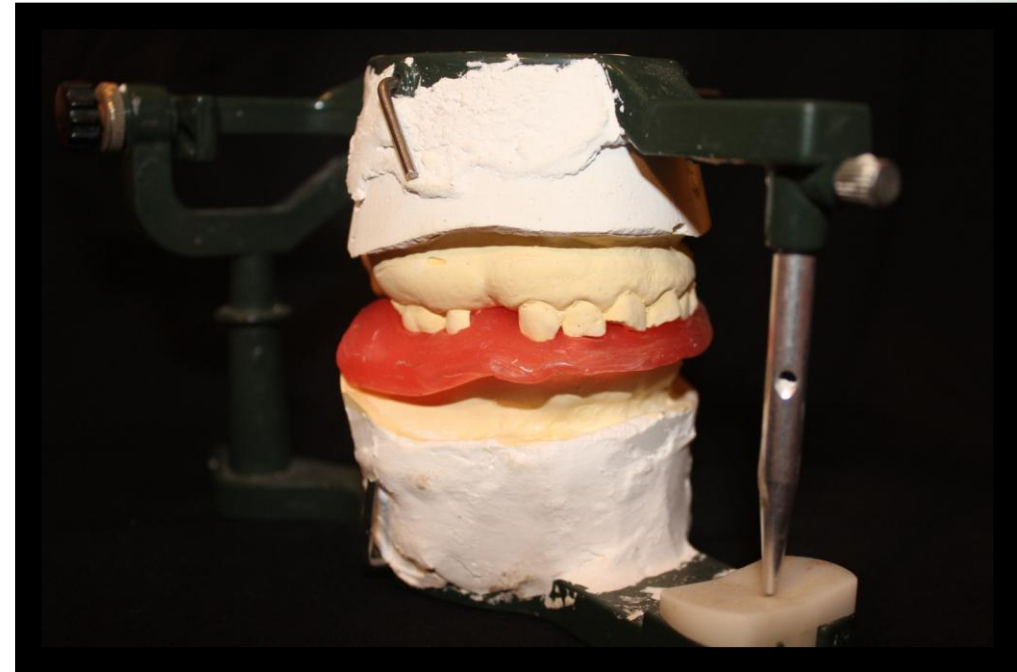
## □ Pretreatment phase:

1. Specialized radiographs : Not needed
2. Medical/physician consultations : Not needed
3. Study models : 



1. Primary impression was taken using Alginate impression material.

2. Diagnostic cast obtained from primary impression mounted on an articulator, using inter-occlusal wax record



نوع الوجبة	المأكولات والمشروبات	الساعة	الأيام
مشهور	سكوت + حليب	7: -	الخميس
مشهور	حليب + قهوه	8: 30	"
مشهور	بيضن بطماطم مسندوتش + عصير	10: -	"
مشهور	مسندوتش جنبه + رشاي	12: -	"
غذائ	محشي ابرك و فلفل + طليخه بازلا + سلاطه + اوسير + ارز	2: -	"
عصيره	سندوتش نازي + برتقال	3: 30	"
عصيره	قهوه + حليب + سكوت	5: 30	"
غذائ	مسندوتش بازلا + عصير	9: -	"
غذائ	اسفطع + ليمون	11: -	"
غذائ	حليب + قهوه + كيك	11: -	"

نوع الوجبة	المأكولات والمشروبات	الساعة	الأيام
مشهور	حليب + رشاي + زمبته	7: -	الانقلاب
مشهور	حليب + قهوه	8: 30	"
مشهور	بيضن + بطماطم	10: -	"
مشهور	مسندوتش زيت + زعفران رشاي	12: -	"
غذائ	مكرونه + دجاج + سلاطه + مشروب نازي	2: 15	"
عصيره	رشاي رضاع	3: 30	"
عصيره	سكوت كوب	5: -	"
عصيره	مسندوتش جنبه	7: -	"
غذائ	فول + بيضن + جنبه + خبز + مشروب نازي	9: -	"
مشهور	حليب + رشاي + سكوت	11: -	"

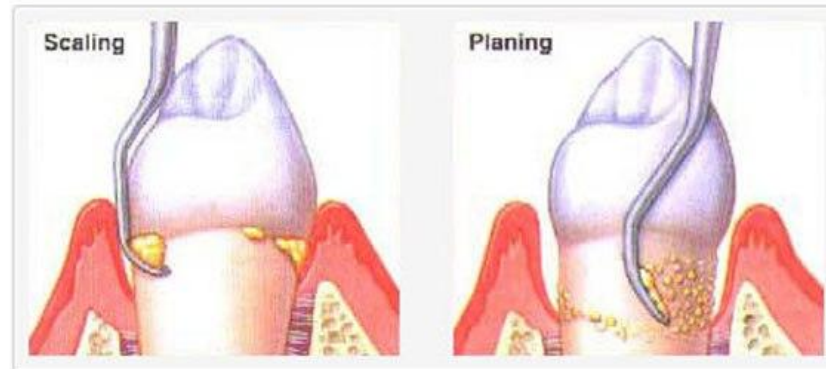
# Diet sheet analysis



مشهور	حليب + رضاع + سكوت	6: -	الاربعاء
مشهور	حليب + قهوه	7: 30	"
مشهور	مسندوتش نازي + بطماطم + مشروب نازي	8: 30	"
مشهور	قهوه	10: -	"
غذائ	طجين بطاطا + سلاطه + اوسير + مشروب نازي	2: -	"
عصيره	كوب سولت	3: 30	"
عصيره	مسندوتش زيت + زعفران رشاي	5: -	"
عصيره	زمبته + كوب حليب + رشاي	7: -	"
غذائ	دش ميسه + عصير + خبز + ليمون مشروب نازي	9: -	"
غذائ	حليب + رشاي	11: -	"

Scaling and  
root planning

Oral hygiene  
instructions



(42) (43)



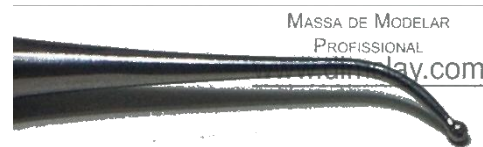
1- Caries excavation

2- Indirect pulp capping

( calcium hydroxide )

3- Temporary restoration

placement ( Glass ionomer )





**(32) (33) (34)**

1. Excavation of caries
2. Glass Ionomer restoration



# (36)

Phase I therapy  
Caries Control Procedure



1. Excavation of caries and old restoration removal
2. Glass Ionomer restoration

(47)

1. Excavation of caries
2. Indirect pulp capping using  $\text{CaOH}_2$  ( Dycal )
3. Glass Ionomer restoration





# Re-Evaluation of response to Phase 1 therapy (After 4 weeks)

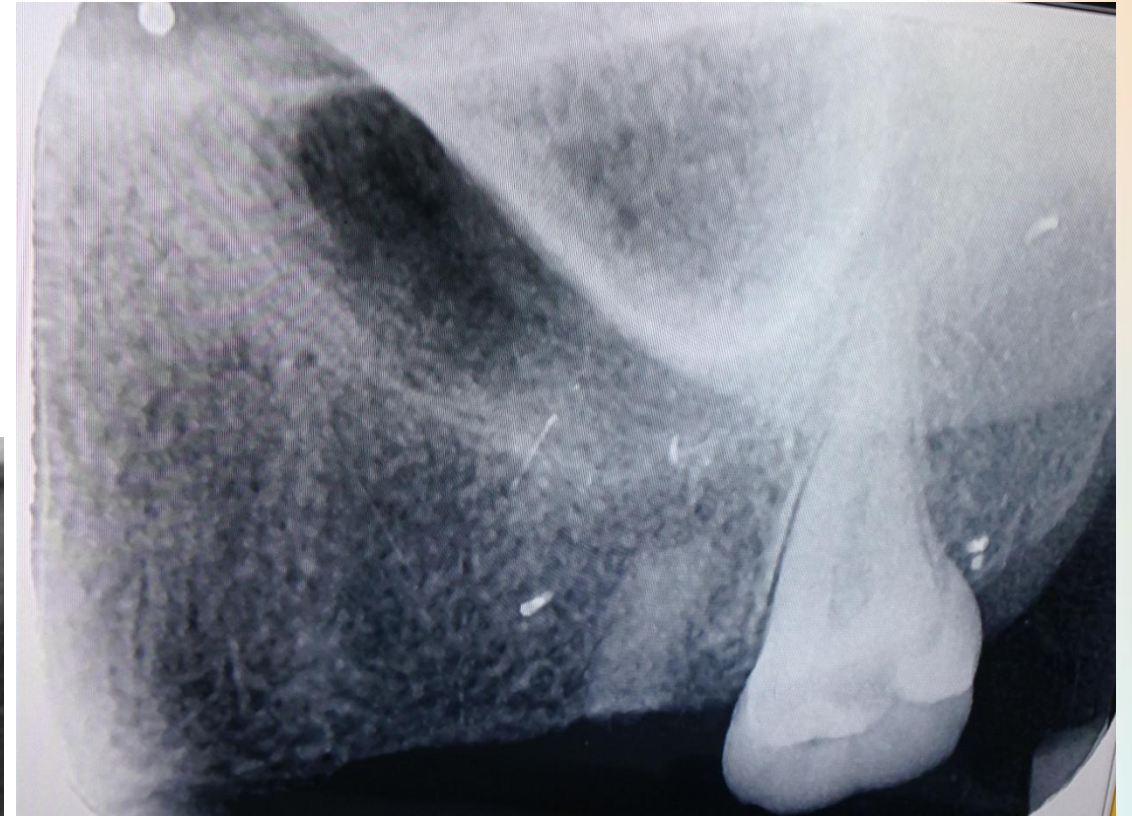
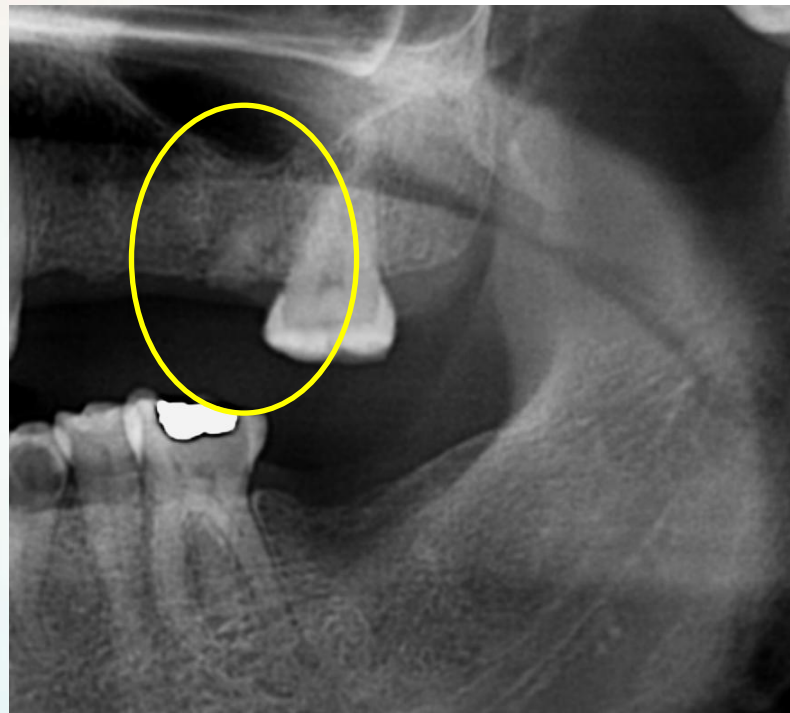
- Patient showed significant improvement of oral hygiene.
- Reduction in pockets depth. And LOA with 1 mm average

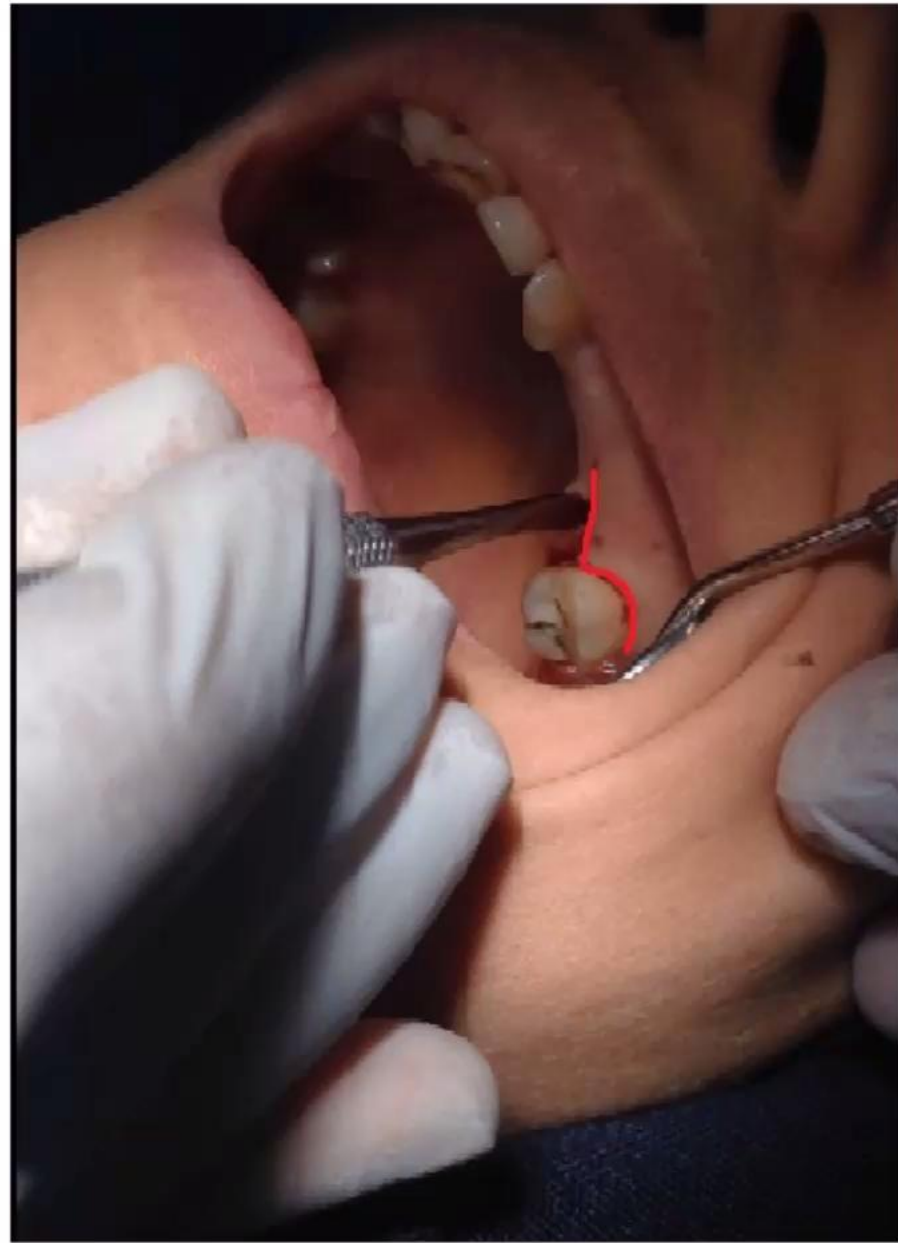






1. Examination :
2. Radiograph :
3. Procedure :

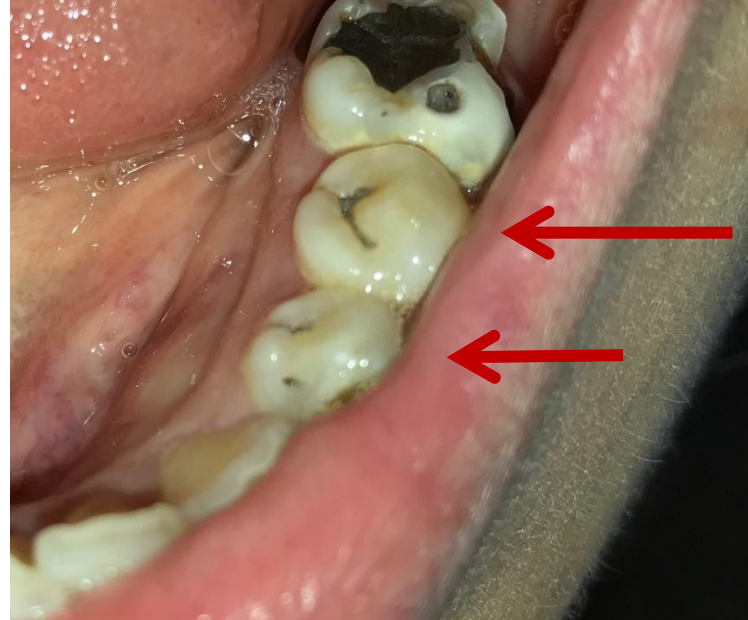




# (34) (35)

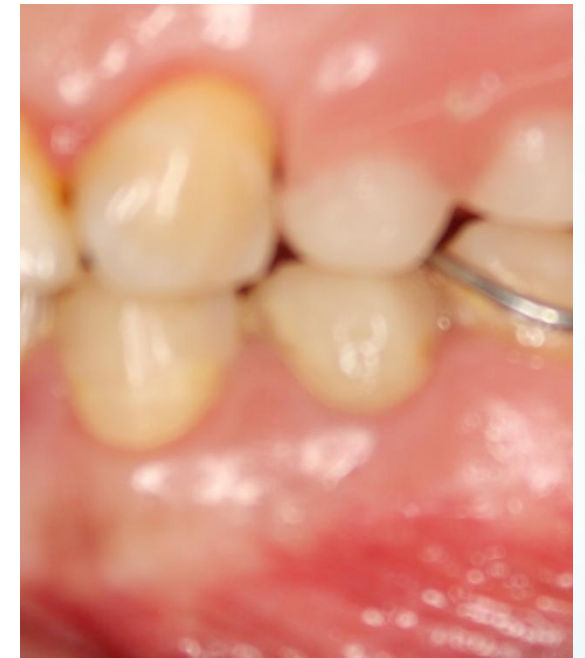
(34) :

1. Removal of glass ionomer restoration ( Buccally )
2. Composite placememnt
3. Removal of caries (Occlusally )
4. Preventive Resin Restoration (Oclusally)



(35) :

1. Caries excavation
2. Composite restoration placement ( Oclusally + cervically )



- Finishing & Polishing
- Occlusion check ( using articulating paper )

1. Glass ionomer restoration removal
  2. Final restoration placement (composite)
- Shade : A1 + A2



(42) (43)



(32) (33) (34)



(16)

# Preventive Resin Restoration





# Root Canal Treatment ( 15 )

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## 1. Examination :

Palpation : Not tender

Percussion : Slightly tender to vertical percussion

## 2. Pre-operative IOPA radiograph :



## 3. Caries excavation & Access cavity



## 4. Master cone



## 5. Post operative radiograph: Obturation



# (27) Procedure :

1. Caries excavation
2. Indirect pulp capping ( Calcium hydroxide placement )
3. Glass ionomer
4. Final restoration placement ( Composite )

Shade : A2

4. Finishing and polishing



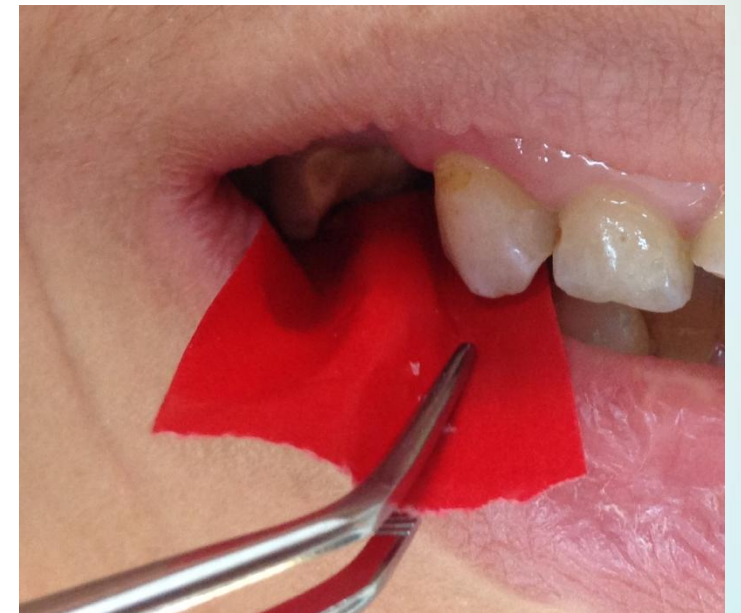
# (13)

1. Caries excavation
2. Cavity preparation (Tunnel preparation )
3. Composite restoration placement



(47)

1. Glass ionomer restoration removal
  2. Final restoration placement (composite)
- Shade : A1 + A2



( 45 )

1. Caries removal and access cavity
2. RCT ( Rotary )
3. composite build up



(44)

Preventive resin restoration

## Longevity of composite build-ups without posts-10-year results of a practice-based study.

[Wierichs RJ](#)<sup>1,2</sup>, [Kramer EJ](#)<sup>3</sup>, [Wolf TG](#)<sup>4</sup>, [Naumann M](#)<sup>5</sup>, [Meyer-Lueckel H](#)<sup>3,4</sup>.

+ Author information

### Abstract

**METHODOLOGY:** Each of seven general dental practitioners placed up to 50 composite build-ups without additional posts in ETT. Teeth were restricted to incisors, canines, and premolars. Several clinical data were recorded for 192 coronal restorations on ETT in 192 patients. Cox proportional hazard models were applied to analyze associations between clinical factors and time until failure.

**CONCLUSION:** For composite build-ups in ETT without post placement, high success rates could be found after up to 10 years of observation time. Within the limitations of the present study, none of the analyzed factors such as "tooth type" or "number of restored tooth surfaces" was a significant predictor for the failure rate.

**CLINICAL RELEVANCE:** Endodontically treated teeth can be successfully directly restored with composite build-ups even when no additional post is inserted.

## Effect of Fiber Post and Cusp Coverage on Fracture Resistance of Endodontically Treated Maxillary Premolars Directly Restored with Composite Resin

Narmin Mohammadi DDS, MSD \*, Mehdi Abed Kahnamoii DDS, MSD \*, Parnian Karimi Yeganeh DDS, MSD †, Elmira Jafari Navimipour DDS, MSD \*  

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<https://doi.org/10.1016/j.joen.2009.07.010>

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### Abstract

#### Introduction

There are different reinforcement methods in restoring root-filled teeth. The aim of this *in vitro* study was to evaluate the effect of fiber post and cusp coverage on fracture resistance of endodontically treated maxillary premolars directly restored with composite resin.

#### Results

There were no significant differences in fracture resistance between the groups ( $P = .057$ ). However,  $\chi^2$  test showed statistically significant differences between the groups in failure mode ( $P < .001$ ). The highest number of favorable fractures was observed in the control group (intact teeth).

#### Conclusions

Root-filled maxillary premolars, restored with direct resin composite with or without fiber post and cusp capping, had similar fracture resistance under static loading.

( 36 )

1. Glass ionomer restoration removal
2. GIC
3. Composite restoration placement  
Shade : A1 + A2
4. Finishing & Polishing





# 1. Clinical examination :

- Not tender to palpation and percussion
- Class 2 (uncomplicated crown fracture)
- No mobility

# 2. Vitality Test ( Electrical pulp tester ) :

Normal response (+ve)

# 3. IOPA Radiograph shows :

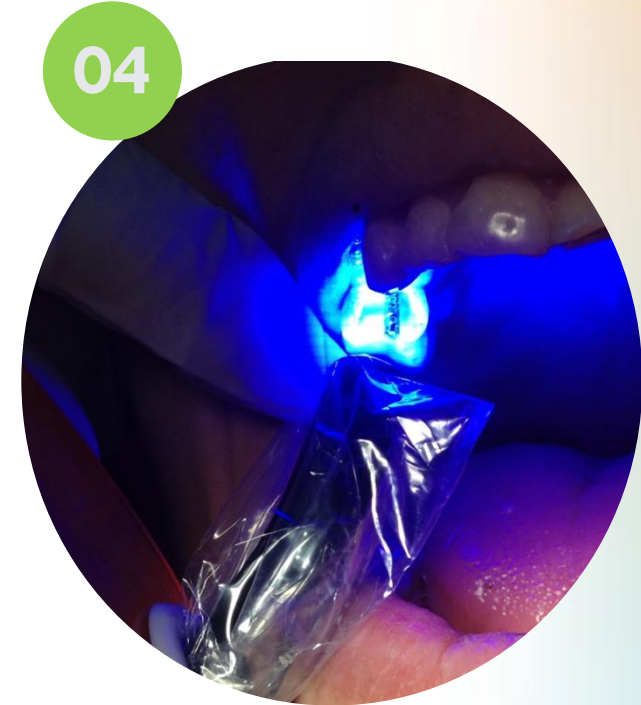
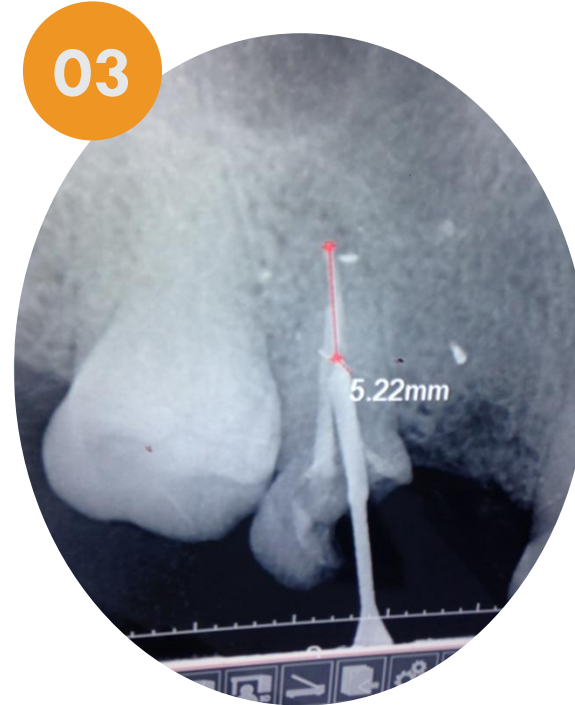
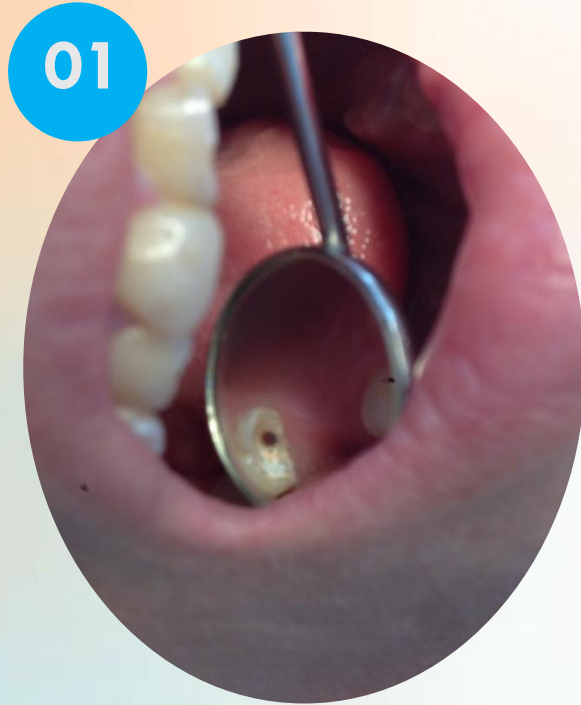


(11) (21)



# (15)

Prefabricated metal post and composite core



- Exploring of orifice
- Canal preparation

**Post Placement**

**Length confirmation**

**Post cementation**

5. Core build-up



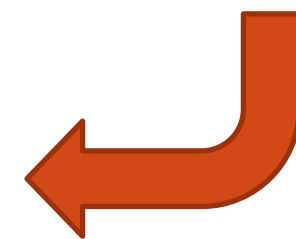
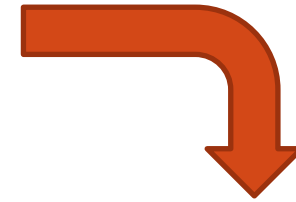
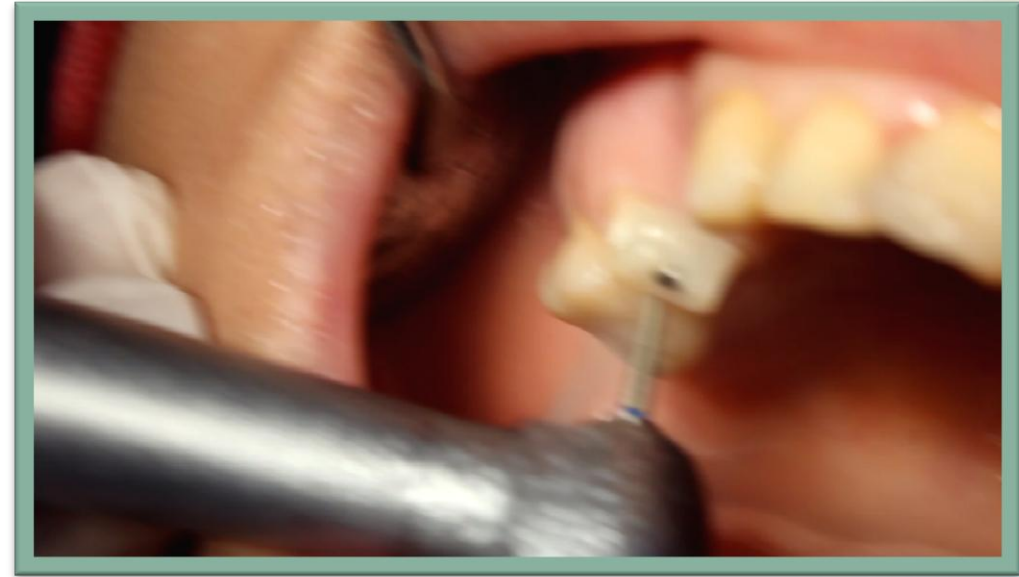
6. Putty index



8. Provisional restoration fabrication



7. Preparation

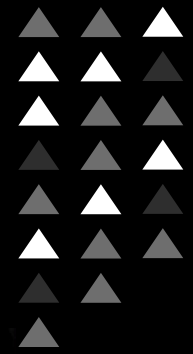
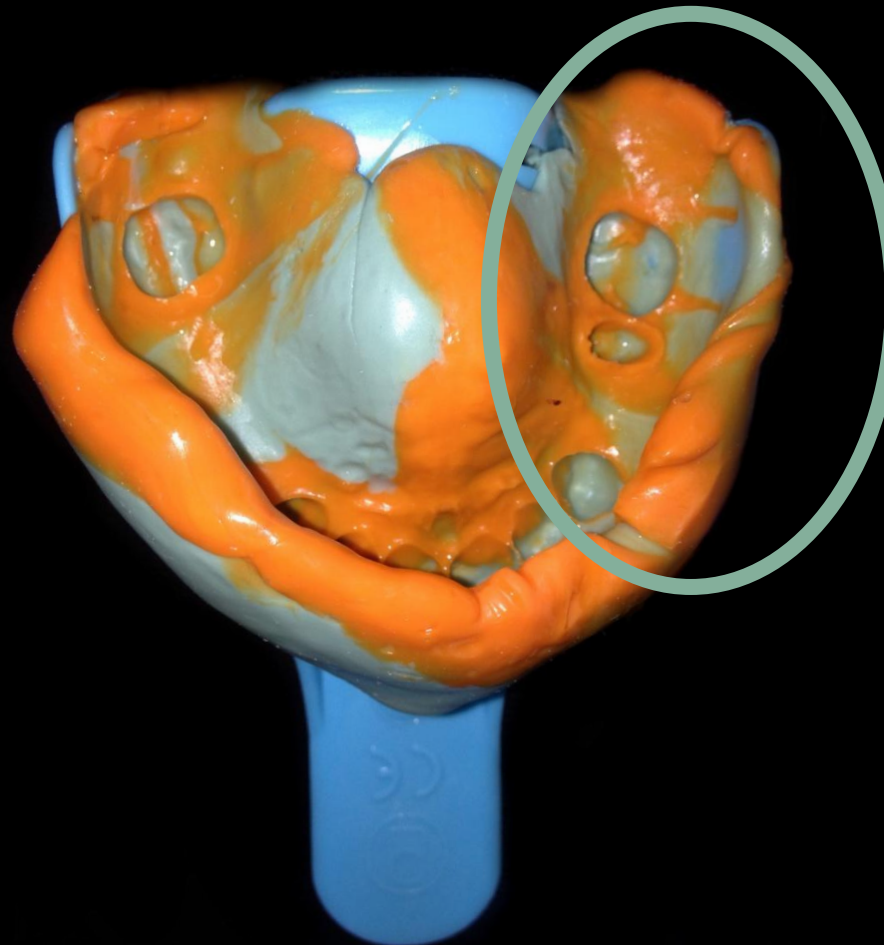


CON

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# 9. Final Impression

- The impression was taken using putty and light body in a double mix, one step technique





10. Shade selection using classic shade guide.

- The shade chosen was ( A3 Cervically / A2 Incisally )



Metal try-in was fabricated and adjustments to any high points were made



# CHECKING AND VERIFICATION

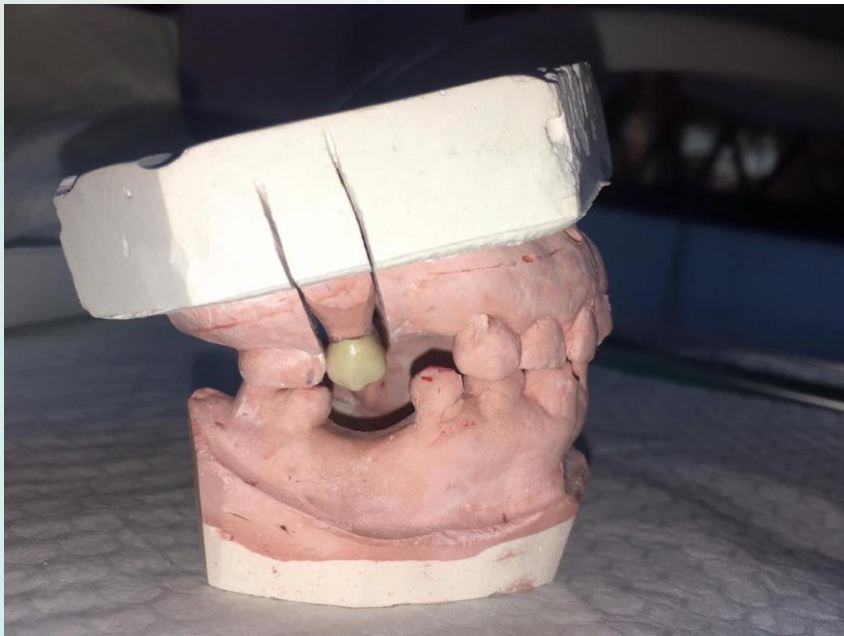
- ✓ Seating
- ✓ Marginal integrity
- ✓ Retention and stability
- ✓ Occlusion
- ✓ Contour and anatomy
- X Esthetics



**CHECKED**

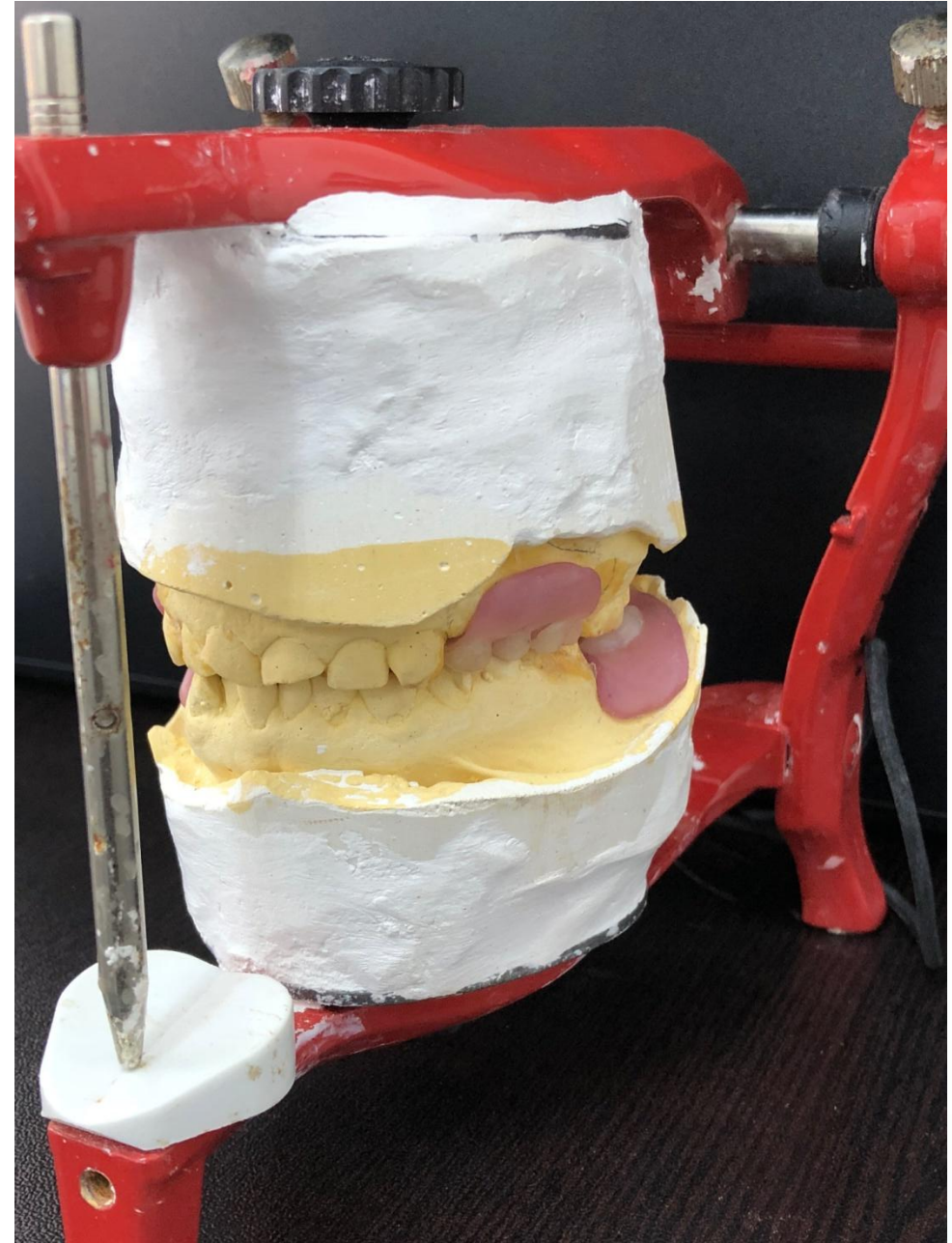
Note: Shade was not good and patient has stain cervically so returned to lab and asked for more details for more natural appearance

Trial cementation of PFM crown for 1 week to ensure complete comfort before final cementation.





- The trial denture bases lie properly on their casts and the teeth meet evenly in Centric and stable
- 
- Borders of the trial denture base are smooth, round, and have no sharp edges





Phase III therapy



This work has been done under supervision of :

Dr.Mohamed Elgtlawi

Dr.Naeima Betamar

Dr.Ali Busnaina

Dr. Nada Kashbor

Dr.Rafiq Al Kuafi

Dr. Abdelmonem Abdelnabi

Dr.Omar Huni

Dr. Amal Al awami

Dr. Hashim Hamouda

Dr. Sara El Kilani





Thank you for your attention

Grazie per l'attenzione

Vielen Dank für Ihre Aufmerksamkeit

Merci de votre attention

Gracias por su atención

С п а с и б о з а

в н и м а н и е

感谢您的关注