



Libyan International Medical University

Comprehensive case presentation

Presented by: Fatimah H. M. Fadhl Roll No.: 744 This work was achieved by the student: **Fatimah Hamad Mohammed Fadhl** under the supervision of dental teaching staff at Libyan International Medical University:

- Rafeeq M. Al Kuafi
- Abdelmonem A. Abdelnabi
- Ranya F. Elemam
- *Ali Busnaina
- Omar A. Huni
- Naeima M. Betamar
- Nada Kashbor
- Malek A. Abdulmatlob

> Personal Data

- Patient's Name : A.S.A.
- D.O.B: 1/1/1990.
- Gender : Male.
- Occupation : student/solidier.
- Address : Alwahishi.
- Nationality: Libyan.

> Chief Complain

 Patient attended to the clinic complaining of severe pain related to his upper left teeth since two days.

> History of Chief Complain

Pain started one year ago, as a mild intermittent pain, related to the upper left teeth, lasts for few minutes, provoked by cold drinks and relieved by eliminating the stimulus, no sleeping disturbance, no associated signs and symptoms, of non radiating nature, no treatment attempts, and it increased in severity two days ago.

→ Severe spontaneous throbbing pain, related to the upper left teeth, lasts for hours, disturbs sleeping, no provoking factors, relieved by analgesics (Ibuprofen 2 tab/d), no associated signs and symptoms, of non radiating nature.

> Medical History

- Free of any chronic illness.
- History of hospitalization due to: Bullet in the leg & extensive trauma to the chest accompanied by fractured ribs have been replaced surgically.
- Systemic review : No abnormality detected.



- History of Antibiotics and analgesics.
- No other medications taken currently.

> Allergic History

- Allergic to Tuna.
- No other allergic history found.

> Dental History

- Symptomatic patient.
- Last visit : one year ago.
- No abnormal, destructive habits.
- History of :
 - 1. Root canal treatment.
 - 2. Restorations.
 - 3.Extraction (without complications).
 - 4. History of trauma → lateral luxation (11)/CIV (12).
- Teeth brushing: patient stopped brushing 7 months ago due to bleeding gum problem, used Miswak for few weeks.

> Family History

No family history of any chronic disease.

> Social History

- Single.
- Student/Solider.
- Patient is smoker since 2008 (1 packet/d).
- weed smoker.
- No alcohol consumption.
- Diet : Regular Libyan diet.
- Water consumption (5-6 glasses of water/day).
- Heavy coffee consumption (5-6 cups/day).

> General Examinations

- Asthenic body built.
- Normal gait, posture, mental status, and speech.

Clinical Examinations

Extra Oral

- 1. Face symmetry: symmetrical.
- 2. Skin: Normal color, no scars.
- 3. TMJ : Average mouth opening, No tenderness, 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 : Straight.



Clinical Examinations Con.

Intra Oral

- 1. Moderate Halitosis.
- 2.O.M: Leukodema was detected, No other abnormalities or lesions.
- 3. Tongue and palate: No abnormality detected.



Clinical Examinations Con.

Oral Hygiene Index -Simplified



✓ Plaque

17	11	26
2	2	2
2	2	1
46	31	36

$$P.I = 11/6 = 1.8$$
.

✓ Calculus

17	11 26	
1	1	1
1	2	2
46	31	36

$$C.I = 8/6 = 1.3.$$

$$OHI-S = 1.8+1.3 = 3.1.$$

 Patient has poor oral hygiene.

Gingival Status

- Gingiva:
- ✓ Bluish red in color.
- ✓ Rolled margins with blunt IDP.
- ✓ Soft and edematous.
- ✓ No enlargement.
- ✓ Bleeding on probing is present.
- ✓ No exudation.
- ✓ Stippling is absent.
- Frenal attachment : Normal.
- Fremitus test : -ve.
- attached gingiva : Adequate.

Periodontal Status



- Diagnosis:
- Generalized mild to moderate chronic periodontitis.
- Overall prognosis:
- Fair.



Hard Tissue Examinations



> Hard Tissue Examinations Con.

- 1. Upper left first premolar "C.C" is not tender to palpation and slightly tender to percussion (TTP).
- 2. History of trauma to the upper anterior teeth since 3 years.
- "CIV (12) & lateral luxation (11)"
- 3. Upper right lateral incisor is TTP.



D.D of Chief Complain

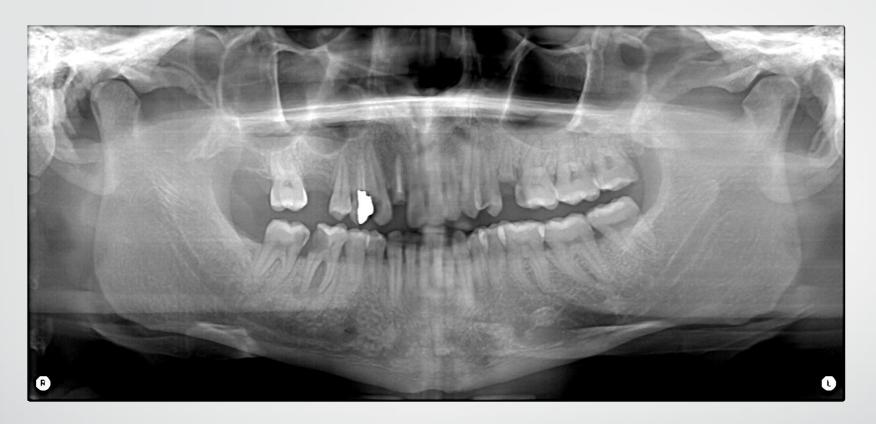
- 1. Acute irreversible pulpitis.
- 2. Acute exacerbation of chronic periapical periodontitis.

> Investigations

- 1.IOPA (24).
- 2.Orthopantomogram (OPG).
- 3. Vitality testing (11).

+ve vitality testing \rightarrow vital (11).





- Panoramic view Showing maxillary and mandibular teeth with generalized mild to moderate bone loss.
- Remaining root (12), (25).
- Radiolucency related to distal aspect of (13) (28) (38) & (46) crowns and mesial aspect of (24), (26) and (47), indicating carious lesions.
- Radiopacity related to mesial aspect of crown of (14) indicating restoration.
- Missing teeth (18) (16) (48).
- endodontically treated (14) (12).
- Periapical radiolucency related to the roots of (46) involving the furcation area.

> Final Diagnosis

- 1. Acute irreversible pulpitis (24).
- 2. Dental caries related to (13)(21)(22)(23)(26)(28) (38)(43)(44)(46)(47).
- 3. Missing teeth (16)(18)(48).
- 4. Generalized mild to moderate chronic periodontitis.

> Treatment plan

- > Emergency Phase:
 - Pulp extirpation (24).
- > Phase I Therapy:
 - Patient motivation and education toward the importance of plaque control.
 - Diet control.
 - Supra and subgingival scalling.
 - Caries excavation and placement of temporary restoration (13)(24)(26)(46)(47).



> Treatment plan Con.

- > Phase II Therapy/ Surgical Phase:
 - Extraction of non-restorable teeth (25)(28).
- > Phase III Therapy/ Restorative Phase :
 - RCT(24)(13)(46).
 - Retreatment (12) (14).
 - Prosthetic reconstruction of decayed teeth :
 - (13) \rightarrow Prefabricated fiber post and core build up + direct composite veneer.
 - (12) → Custom made cast post and core + PFM crown.
 - (21)(22)(23)(43)(44) Composite restoration.
 - (24) → Prefabricated metal post + Composite core build up.
 - $(26)(47) \rightarrow IPC + Composite restoration.$
 - (46) → Prefabricated metal post and core build up + PFM crown.
 - Replacement of missing (16) → Fixed-fixed PFM PFD.
 - Replacement of missing (25) → Resin bonded PFD.

> Treatment plan Con.

- > Phase IV Therapy/ Maintenance & Recall:
 - Periodic checking 1st after 3 months, then after every 6 months if maintenance achieved.



Emergency Phase:

• Pulp extirpation (24).





Diet Sheet Analysis

✓ The diet sheet was discussed with the patient, supporting their good habits & explaining the effect of the bad ones on their oral health and how to decrease and stop that effect.

	الساعة	الوجبة	نوع الوج	نبة	
Ĺ	a.m 9:10	دخان + قهوة عربية	فطور		
	p.m 2:40	بامیا + رز أبیض + کوب ماء + دخان	غداء		
	p.m 8:00	سندوتش مكسيكانا + بيبسي دخان + كوب ماء	عشاء		
		الأيام	ىاعة	الوجبة	

الجمعة	a.m 9:00	موز + عوينة + بطيخ كوب ماء	فطور	
	a.m 11:17	مكياطة + كيكة + دخان + كوب ماء		الأيا
	p.m 3:00	بازین + بیبسي	غداء	الخد
	a.m 12:30	سندوتش دحي + جبنة + كوب حليب كوب	عشاء	

نوع الوجبة



_					
.p.m 10 دحي + جبنة + هريسة		ام	الساعة	الوجبة	نوع الوجبة
دخان.		السبت	a.m 8:00	مكياطة + كيكة + دخان	فطور
			a.m 11:00	سندوتش كبدة + بيبسي + دخان	
				کوب ماء	
			p.m 4: 30	فاصولياء + سلاطة + بيبسي + دخان	غداء
•			p.m 8:00	دلاع + موز + دخان	
			a.m 12:00	سندوتش دحي + جبنة + حليب + دخان + كوب ماء	عشاء



Scalling







Scalling Con.







Caries Excavation

(24)







Caries Excavation Con.

(26)

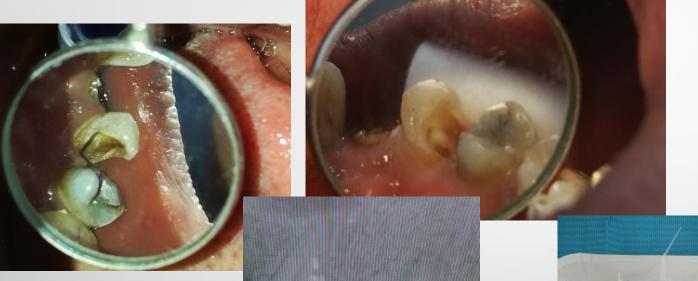


Caries Excavation Con.

(46)(47)



EMERGENCY



• During the work, the patient came to the clinic complaining of severe throbbing pain related to his upper right canine, since one day, impairing his ability to talk, bite normally.

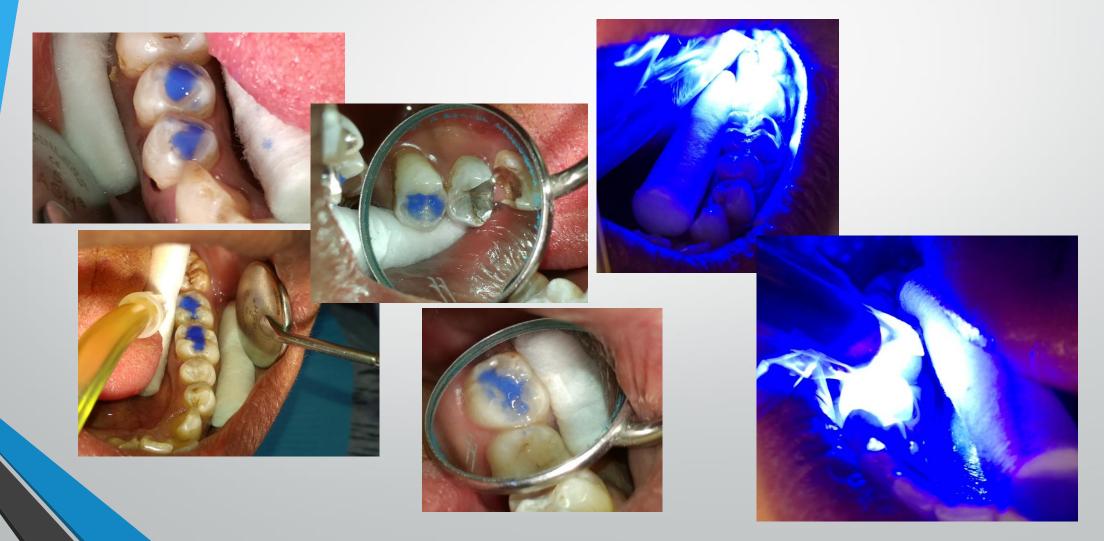
• Tooth was severely sensitive to percussion.

 Caries excavation and pulp extirpation was done, pus drained through the canal and an intra-canal medicament was placed →

Metapex (CaOH).

Pit and fissure sealant

(15)(27)(37)(36)(35)(44)(45)



Pit and fissure sealent

(15)(27)(37)(36)(35)(44)(45)









Re-evaluation phase

- Patient showed significant improvement of oral hyagien.
- Improved gingival status.
- Reduction of pockets depth.

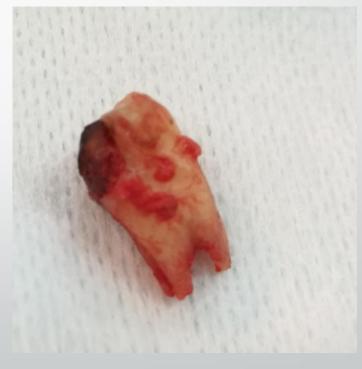


Surgical Phase

Extraction of non-restorable teeth (25)(28)







Surgical Phase Con.

Extraction of non-restorable teeth (25)(28)









Restorative Phase

RCT, Post placement and core build up
(24)



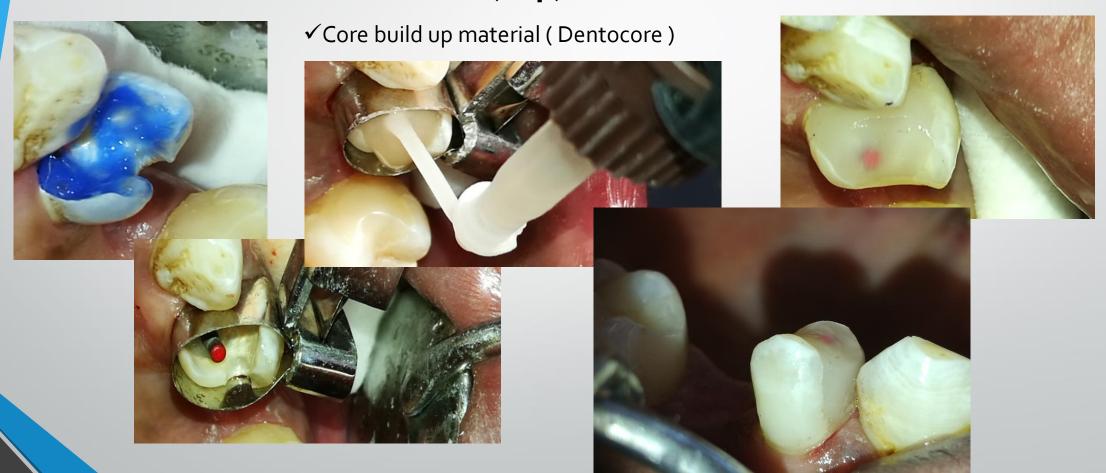








RCT, Post placement and core build up (24)





RCT (Rotary) and placement of GIC filling (46)







RCT, Post placement and composite core build up

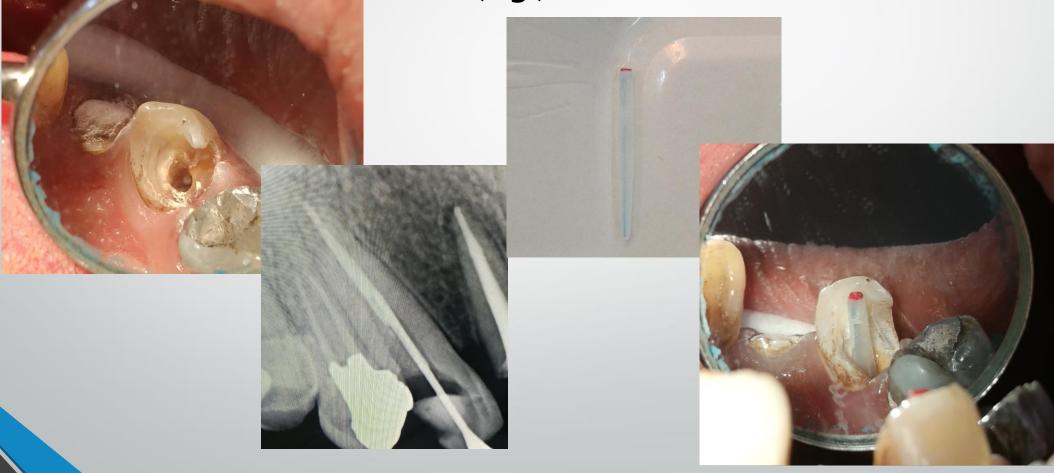
(13)





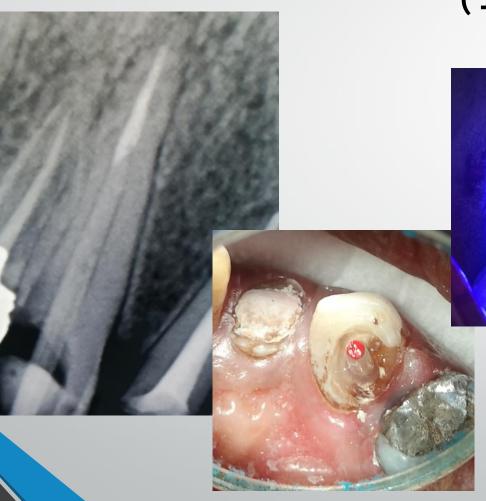


RCT, Post placement and composite core build up
(13)



RCT, Post placement and composite core build up

(13)





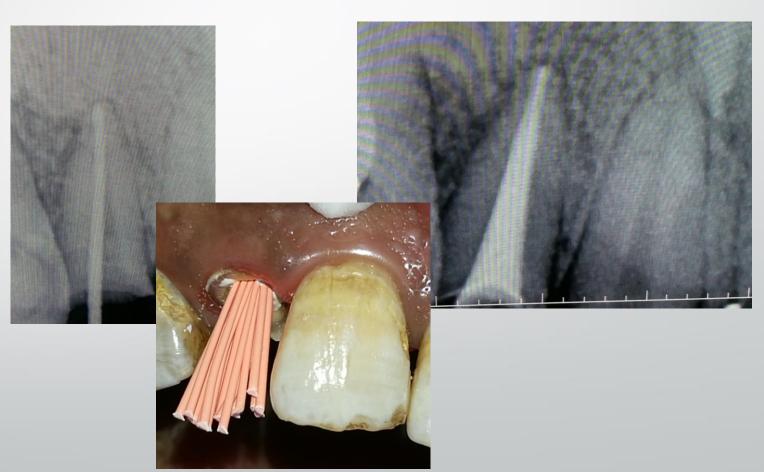




Endodontic Retreatment (12)







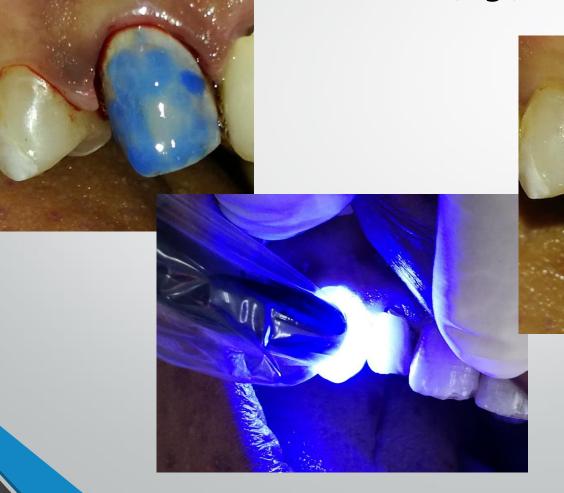
Composite veneer (13)





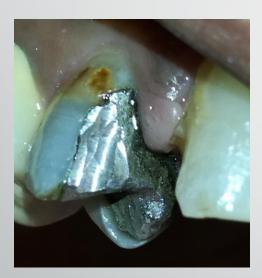


Composite veneer (13)





Replacement of Amalgam restoration (14)











Composite restoration (21)(22)(23)(26)(43)(44)(47)



(26)



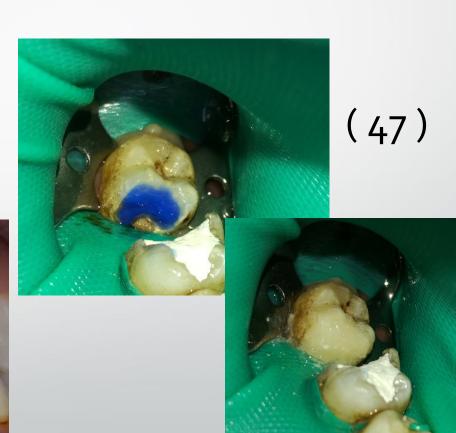
(43)(44)



Composite restoration (21)(22)(23)(26)(43)(44)(47)







Replacement of missing (16)(12)



✓ Primary impression is taken using Alginate impression material.

Replacement of missing (16)(12)





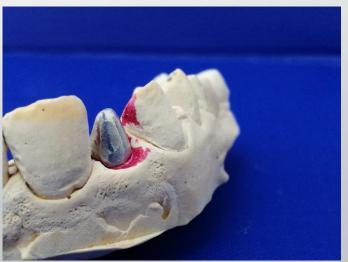


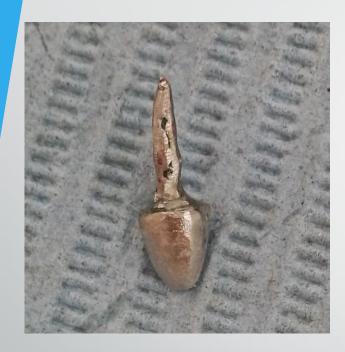
✓ Diagnostic cast with wax up obtained from primary impression











✓ Try in / Cementation





✓ Radiographic verification

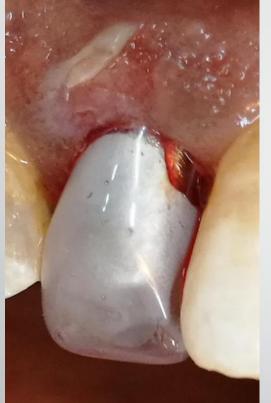
Fabrication of custom made cast post and core + PFM crown (12)

√ Shade selection / Final impression.



(A3 Cervical/A2 Incisal)











Fabrication of custom made cast post and core + PFM crown (12)

✓ Metal try-in



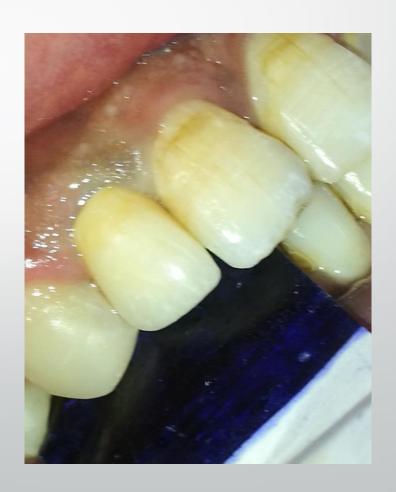


Endodontic Retreatment & fabrication of custom made cast post and core + PFM crown

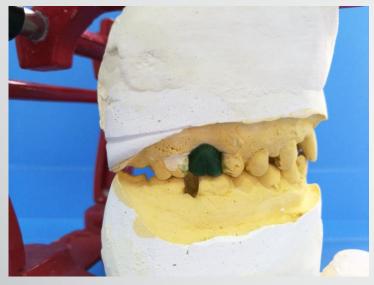
(12)

✓ Trial cementation





Replacement of missing (16)







✓ Diagnostic wax up

Replacement of missing (16)

✓ Putty index (For temporization)







✓ Preparation of abutment teeth (17) (15).



✓ Placement of retraction cord.



✓ Final impression.





- ✓ Alginate impression of opposing arch.
- ✓ And an additional impression of the upper arch for fabrication of temporary bridge.



Self cure Acrylic resin









✓ Temporary bridge fabrication

Replacement of missing (16)

✓ Metal try in.



Replacement of missing (16)

√ Complete seating





✓ Occlusion





✓ Marginal integrity



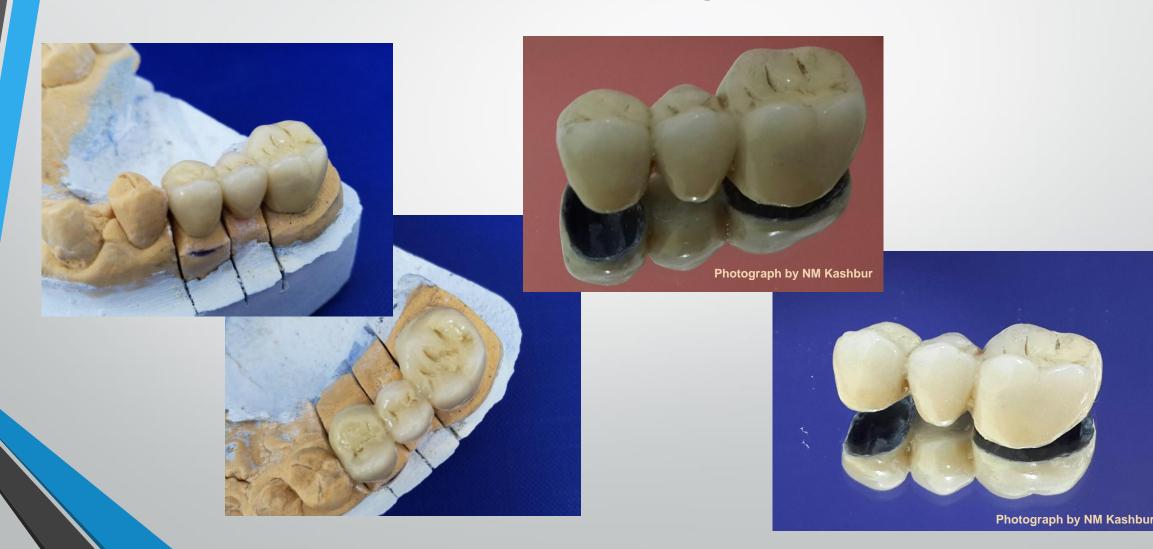


✓ Stability.

Replacement of missing (16)



Shade selection (A3/A2)









Trial cementation









- ✓ Final cementation after 1 week, using GIC.
- ✓ No gingival tissue irritation detected.

Pre-operative





Post-operative





Be fore

After





Be fore

After





Be fore

After







