Comprehensive case presentation

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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:

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- Nada Kashbor
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• Patient’s Name : A.S.A.
• D.O.B : 1/1/1990.
• Gender : Male.
• Occupation : student/soldier.
• Address : Alwahishi.
• Nationality : Libyan.
Patient attended to the clinic complaining of severe pain related to his upper left teeth since two days.
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.

Drug History

• 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:
  2. Restorations.
  3. Extraction (without complications).
• Teeth brushing: patient stopped brushing 7 months ago due to bleeding gum problem, used Miswak for few weeks.
• No family history of any chronic disease.

• 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.
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.
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

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P.I = 11/6 = 1.8.

✓ Calculus

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C.I = 8/6 = 1.3.

OHI-S = 1.8 + 1.3 = 3.1.

• Patient has poor oral hygiene.
• **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.
• Diagnosis:
  - Generalized mild to moderate chronic periodontitis.
• Overall prognosis:
  - Fair.
Hard Tissue Examinations
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. “C IV (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 ➔ 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.
1. Acute irreversible pulpitis (24).
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 scaling.

Re-evaluation of Phase I
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) ➔ Prefabricated fiber post and core build up + direct composite veneer.
  - (12) ➔ Custom made cast post and core + PFM crown.
  - (24) ➔ Prefabricated metal post + Composite core build up.
  - (26)(47) ➔ 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.
• Periodic checking 1st after 3 months, then after every 6 months if maintenance achieved.
Emergency Phase:

- Pulp extirpation (24).
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.

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<th>Time</th>
<th>Day</th>
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<td>مكة + ككة + دخان</td>
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<td>كوب ماء</td>
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Scalling
Scalling Con.
Caries Excavation

(24)
Caries Excavation Con.

(26)
Caries Excavation Con. 

(46)(47)
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 sealant

(15) (27) (37) (36) (35) (44) (45)
Patient showed significant improvement of oral hygiene.
Improved gingival status.
Reduction of pockets depth.
Extraction of non-restorable teeth (25) (28)
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)

- Core build up material (Dentocore)
RCT (Rotary) and placement of GIC filling (46)
RCT, Post placement and composite core build up (13)
Restorative Phase Con.

RCT, Post placement and composite core build up

(13)
Restorative Phase Con.

RCT, Post placement and composite core build up

(13)
Restorative Phase Con.

Endodontic Retreatment

(12)
Restorative Phase Con.

Composite veneer

(13)
Restorative Phase Con.

Composite veneer

(13)
Replacement of Amalgam restoration
(14)
Restorative Phase Con.

Composite restoration

(26)

(43)(44)
Composite restoration
Replacement of missing (16) (12)

- Primary impression is taken using Alginate impression material.
Restorative Phase Con.

Replacement of missing (16) (12)

✓ Diagnostic cast with wax up obtained from primary impression
Restorative Phase Con.

Fabrication of custom made cast post and core + PFM crown

(12)
Restorative Phase Con.

Fabrication of custom made cast post and core + PFM crown

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

(12)

✔ Try in / Cementation

✔ Radiographic verification
Restorative Phase Con.

Fabrication of custom made cast post and core + PFM crown

✓ Shade selection / Final impression.

(A3 Cervical/ A2 Incisal)
Restorative Phase Con.

Fabrication of custom made cast post and core + PFM crown

(12)

✓ Temporary crown fabrication
Fabrication of custom made cast post and core + PFM crown

✓ Metal try-in
Restorative Phase Con.

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

✓ Trial cementation
Restorative Phase Con.

Replacement of missing (16)

✔ Diagnostic wax up
Restorative Phase Con.  
Replacement of missing (16)

✓ Putty index
  (For temporization)
Restorative Phase Con.

Replacement of missing (16)

- Preparation of abutment teeth (17)(15).
- Placement of retraction cord.
- Final impression.
Replacement of missing (16)

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

Replacement of missing (16)

Self cure Acrylic resin

✓ Temporary bridge fabrication
Restorative Phase Con.

Replacement of missing (16)

✔ Metal try in.
Restorative Phase Con.

Replacement of missing (16)

- Complete seating
- Occlusion
- Marginal integrity
- Stability.
Restorative Phase Con.

Replacement of missing (16)

Shade selection (A3/A2)
Restorative Phase Con.

Replacement of missing (16)
Restorative Phase Con.

Replacement of missing (16)

Trial cementation
Restorative Phase Con.

Replacement of missing (16)

- Final cementation after 1 week, using GIC.
- No gingival tissue irritation detected.
Pre-operative
Post-operative