Comprehensive treatment - Full Mouth Rehabilitation case

Presented by:
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Role number: 723
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Personal Data

Name: Z.K.E

Age: 19 years (30/03/1998)

Gender: Female

Nationally: Libyan

Occupation: Student

Material & Society: Single
Chief complaint & History of Chief complaint (1)

- **C.C:**
  
Pain related to lower left back teeth, since one week.

- **H.C:**
  
Acute throbbing intermittent localized pain started one week ago, triggered by biting on heard objects. Once the pain starts it takes minutes to stops by its own. It doesn’t interfere with sleeping. Also the patient doesn’t notice any referred or radiating pain. No medication was taken by the patient.

The tooth was diagnosed one year ago as irreversible pulpitis by another dentist. And the patient tended just one visit and doesn’t complete the treatment.
Medical history: N.O.S

Drug history: N.O.S

Allergic history: N.O.S

Family history: N.O.S

Social history: single. Not smoker neither alcohol drinker or drug abuser.

P.t is on balanced diet and drinking about 8 cups of water daily, brushing teeth twice a day with vertical and horizontal techniques. Sometime she is using mouthwash also.
Dental history

- Not completed **RCT** for the lower first molars, hence patient attended just one visit.

**Oral hygiene practice:**

- **Brushing**: twice a day regularly
- **Brushing method**: horizontal and vertical
- **Kind of Dentifrice used**: not specific
- **Any other orophysiotherapeutic Aids**: sometimes using mouthwash
Extra-oral examinations

- **TMJ status:**
  - examination reveals no clicking, crepitation, limitation or deviation of mouth opening, with no masticatory muscles tenderness.

- **Lymph nodes:**
  - not palpable, neither tender.
Dental Chart

DMFT: 11
Clinical examination for the offending tooth revealed badly broken down tooth. Which is tender to **vertical** percussion, but it’s not tender to palpation.

**Differential diagnosis:**

1) acute periapical periodontitis
2) acute periapical abscess
3) Periapical granuloma
Intraoral Periapical radiograph
Final diagnosis:

Acute periapical periodontitis
Treatment plan

- **Emergency phase**: extraction

- **Phase I**: O.H instruction & scaling
- Reevaluation of phase I

- **Phase II**: extraction

- **Phase III**: restoration
  - Replacing of missing teeth

- **Phase IV**: reevaluation
Five months later:

- the patient came to the clinic with two chief complaints.
- **The 1\textsuperscript{st}:** in patient words ‘I need to replace the missing tooth’
- **H.C:** the tooth was extracted 5 month ago, due to caries as it was diagnosed as hopeless tooth. (no complications)

_________________________

- **The 2\textsuperscript{nd}:** bleeding on brushing since one week.
- **H.O:** bleeding on brushing related to upper right anterior teeth, started with brushing and stops after 1 minute by its own. Accomplished by mild annoying dull pain. p.t tried to use salty water rinse but with no to little improvement.
Extra-oral photographs

strait profile
Dental chart

DMFT: 11
oral hygiene index simplified: 0.3 good
Periodontal health

- Normal gingival collar pink color, with normal scalloped margin, and knife edge IDP. Except the area related to chief complaint exhibit some gingival oedema with blunt IDP.

- There is normal stippled gingivae.

- Pocket depth within normal range for all aspects.

- There is bleeding on probing related to upper Right central incisor, upper right lateral incisor and upper right canine of score 1 SBI.

- There is no mobility.

- There is no recession.
Intraoral photographs
Extra oral radiograph
Extra Oral Orthopantogramic Radiograph
- The patient is **unidirectional** group function occlusion.
- **Class III** with no modification according to Kennedy classification.
Treatment plan
Treatment plan

**Phase I therapy:**

- Patient motivation.
- Oral hygiene instructions.
- Scaling.
- Fluoride application / Fluoride varnish *

Reevaluation of phase I therapy .
<table>
<thead>
<tr>
<th>Type of Meal</th>
<th>Foods and Beverages</th>
<th>Time</th>
</tr>
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<tbody>
<tr>
<td>Breakfast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td></td>
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<tr>
<td>Dinner</td>
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<td></td>
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<tr>
<td>Snack</td>
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<td></td>
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</tbody>
</table>
Phase I
Treatment plan

Phase II therapy:

- Extraction of 7

Because the offending tooth is non-restorable badly broken down tooth, that is tender to vertical percussion.

Diagnosed as:

Chronic periapical periodontitis.
Lower right 2nd molar
Intraoral Periapical Radiograph
# Treatment plan

## Phase III therapy:

- **Restoration of decayed**
  - Teeth: 7 6, 2, 4 5 6 7
  - 6 5

- **Replacement of missing**
  - Teeth: 7, 6
**Different treatment options**

### Restorations choices:

- Composite
  - 67
  - 2
  - 4 5 6 7
- Amalgam
  - 5
- GIC
- Onlay / inlay
  - 6

### Replacement choices:

- Removable partial denture
- Replacement of missing conventional fixed – fixed FPD
  - with tooth supported
  - 6
- Implant
- Transplantation
  - 8
Phase IV

FOLLOW UP
Reevaluation of Phase I therapy

- P.t was satisfied, the **bleeding on brushing** problem was resolved.
- No plaque or calculus present.
- Pocket within normal depth.
Before and after
Phase II therapy

- This phase of treatment was shifted to be done after phase III.
Phase III – part 1

- Restoration of carious teeth.
Upper right 2\textsuperscript{nd} molar
Upper right 1\textsuperscript{st} molar
Upper left 1st molar
Upper left 1\textsuperscript{st} & 2\textsuperscript{nd} premolars
Upper right lateral incisor
Lower right 2\textsuperscript{nd} premolar
Lower right 2\textsuperscript{nd} premolar
Phase III – part 2 (indirect restoration)
Lower right 1st molar – onlay preparation
composite try-in
Acrylic try-in
Shade selection
E-max onlay
Occlusal adjustment
Onlay surface treatment
Self etching, self adhesive resin cement
Cementation dual
Primary impression
Bite registration
Diagnostic casts mounted on an articulator
Diagnostic casts mounted on an articulator
Wax-up
Index taking for the purpose of provisional bridge fabrication
Phase III part 3 – replacement of missing lower left 2\textsuperscript{nd} molar by PFM bridge
Bridge preparation of L 5X7
Preparation of the abutment teeth
Gingival retraction before final impression making
Final impression
Temporary Bridge
Metal frame work
Checking and verification of metal framework
Shade selection
PFM bridge with modified ridge lap pontic design
Occlusal adjustment followed by reglazing
trial cementation
Final cementation of the PFM bridge by using GIC
Reevaluation of phase III
Phase II ...
transplantation

- Extraction of lower right 3rd molar to replace the lower right 2nd molar.
surgery – extraction of lower right 2\textsuperscript{nd} molar
Extraction of the lower right 3rd molar and transplant it in the lower right 2nd molar socket
Extraction of the lower right 3rd molar and transplant it in the lower right 2nd molar socket
Splinting with composite
Suturing
Occlusal adjustment
Post surgical radiograph
After three weeks later

- There is no pain, neither swelling nor tenderness.
- No mobility.
Root canal treatment was done
Phase IV : reevaluation

- Gingival health within normal, no signs of inflammation or active disease.
- There are No complications related to FPD or the onlay
Before and after treatment

before

after
Before and after treatment
Thank You