Shahed hijazeen ortho#5 30/12/2015

-We will talk about the (risks and benefits) of orthodontic treatment

-the concept of consultation in ortho department is very important we should explain to the patient what we expect, what we will do and what the patients need

\*the benefits of orthodontic treatment:

1- Resistance of caries and periodontal disease

2-phycological

3-tooth impaction

4-improve mascatory efficacy

5-improve speech

6- Prevention of trauma

7-releave the TMDS

**a) Resistance to caries:**

-there is no evidence that ortho treatment will reduce the caries but maybe because the ortho treatment improve the alignment of teeth so the brushing will be better

-it is mainly related to behavior of the patient (oral hygiene habits)

 **B) Resistance of Periodontal disease**

-association is weak with ortho treatment

-there is some situation where is the ortho treatment is beneficial (anterior cross bite / deep traumatic over bite that cause ulceration

  **c) Improve masticatory efficacy**

-association is week also

-but there is some situation like anterior open bite 🡪 who can’t eat food /class 3 patient / and patient with multiple missing teeth (hypodontia)

 **d) Tooth impaction**

-impacted teeth cause root resorption to adjacent teeth like impacted canine cause root resorption to the lateral

-impacted tooth may cause cystic lesion

 **e) TMJ problems**

-it is multifactorial

-the phcological state have a role in TMJ problem

-there is no evidence on long term that ortho treatment improve the TMJ problem

-but there is situation where ortho treatment of anterior cross bite displacement or posterior cross bite displacement, even open bit or deep bite will help in relieving the TMJ problem

 **f) Improvement of speech**

-anterior open bite /class 3 mainly affecting the speech

-we hope in the end of ortho treatment the speech will improve but mainly it depends on speech center and the child itself

 **g) Prevent trauma**

-increase over jet with incompetent lip cause trauma

-if the over jet more than 1mm that will increase the sustibility of trauma

- One of the indications of early treatment is the increase over jet

 **h) Phcological benefits**

-number one for teasing between children in Jordan is the teeth and account 50%

-sever malocclusion is mainly the cause

**\*Risks of ortho treatment**

 **a)** Intra oral (enamel decalcification /enamel fracture /root resorption /gingivitis /periodontitis /loss of vitality of the pulp /ulceration of mucosa)

**b)** Extra oral (flattened of patient profile / ocular injury /TMDS / dermatological reaction)

**c)** General (pain/ poor patient satisfaction)

**🡪intra oral risks**

\*enamel decalcification (read the paper that doctor gave us)

-to prevent it we describe topical fluoride or by using glass inomer cement or restorative treatment

\*enamel fracture

-mainly happen in **older version of ceramic brackets** because in ceramic brackets the failure happen between composite and the tooth, not the composite and bracket which happen in metal bracket

\*root resorption

-when we use high force

-maybe localize or generalize

\*gingivitis

-bands are the cause

- The patient should make scaling and polishing every 3 month

\*periodontitis

-we don’t treat any patient with bad oral heigen or periodontal disease

\*loss of vitality

-rare

\*mucosa

-traumatic ulceration is common from the wire

-denture stomatitis candida albican

-allergic reaction mainly from nickel (nonspecific reaction, develop in 1-2 days, quicker to develop than reaction that happen because of bad oral hygiene

* **Extra oral risks**

\*flattened patient profile

-mainly happen if the patient has **severe class 2 malocclusion** and he don’t want to do surgery so that’s why we treat mild to moderate class 2

\*TMDS

-maybe there is interference

\*ocular injury

-head gear without using protective device

\*dermatological reaction

-nickel in head gear device

-latex reaction from gloves

**🡪General risks**

\*pain

-either from pulp or mucosa

\*poor patient satisfaction

-relapse of orthodontic treatment should explain to the patient

**#orthodontic emergency**

**1-elastic broken: put a new one by mosquito**

**2- Pain: prescribe to him pain killers**

**3-ulcer: u can use wax or topical anesthesia**

**4-loss of brackets**

**5-chokling: swallowing a sharp object u can use the distal end cutter**

**\*The dentist should have following in his clinic**

**Distal end cutter and the mosquito in order to deal with orthodontic emergency**

**\*First check up for orthodontic problems not more than 7 years (10 for females and 11 for males which is the period of mixed dentition)**

**\*if the canine not palpable in the buccal sulcus at 10,5 years we should investigate also the sequence of eruption if it is disrupted we should investigate**

**\*skeletal class 3 patient should treat not more 8 years**

**\*skeletal class 2 patient should treat at growth period so that we can use functional appliance**