Radiology Sheet #12

Done by Abdelaziz Al-shawa

**Radiographic selection criteria**

**You have to read the slides, this sheet contains extra notes only**

-We have to know when it’s necessary to take a radiograph , and what type of radiograph we should take…

-Some dentists take radiographs more than needed , all the time and for all patients …. On the other hand there’s who are on extremely on the conservative side and there’re not interested in radiographs

-Revision of radiograph types and their uses ;

\*periapical : to view teeth, associated structures **, periapical diseases ,** may be some caries

\*bitewing : coronal aspect of maxillary and mandibular teeth ,interproximal caries and crestal bone level

\*occlusal : we still see teeth and apices but with larger area of the bone of the maxilla and mandible ,floor of the mouth , salivary gland canal calcification

\*panoramic : nice overview , count the teeth, compare both sides , check out maxillary sinuses and the condyles

-Selection criteria is a guideline , and could be modified based on the clinical situation

-Why do we do selection criteria , and not to take a radiographs for all patients ? , because of the risk of **Exposure** and to a less importance , to contain the healthcare cost…because radiographs are taken for a large number of people , not because of the single image cost

-Basis for Guidelines : they are for the frequent cases and general stuff like caries and periodontitis..etc , but tumors and out-the-scope things have a different protocols

-occult pathology is the pathology that can’t be seen clinically

-decision depends on (benefit vs risk)

-your evaluation in up there in clinics ; not only the quality of the radiograph , but also about the reason behand taking the radiograph and why you take this type of radiographs in particular.

-it’s very important to try to obtain a previous radiograph

New patients

-for a New **Child** patient with no pre-existing radiograph; if all of his teeth are primary you must take a **posterior bitewings (two bitewings)** , and if he was in the transitional state; you might supplement the **posterior bitewings** with **a periapical radiographs** depending of clinical signs

-New adolescent patient with no pre-existing radiograph; if he was a regular patient with normal needs /low risk for caries , he needs bitewings (4 bitewings) and a panoramic radiograph whit periapicals if needed

But if it was an adolescent with a generalized treatment/problem (caries and restorations everywhere, amelogenesis imperfecta ) , or if you’re planning for an extensive treatment; this patient needs a full mouth series

-New edentulous patient with no pre-existing radiograph > panoramic radiograph to check the bone ,any intrabony pathology ,remaining roots ,long term impactions …so we need a base line

Recall patients

-primary teeth generally have a higher risk for caries because of large pulp(thin enamel and dentine) and less mineralization

-it’s rare to have a child with a perio disease , and it’s related to some sort of systemic/genetic problem and the decision is based on the clinical situation

-for growth and development ; Panoramic radiograph at 6 and 12 years , why ? at age 6 incisors and first molar are erupted and you can count the other tooth buds , at age 12 the second molar erupted , start and end points …there’s so much you can do if you detect impactions and congenitally missing teeth early , after that the treatment will be much more challenging and expensive

- for an adolescent ; if there’s no indications for a problems related to the third molars > no need for Panoramics (assuming that he takes radiographs at age 6 and 12, so you’re sure about teeth number)

-for recall patients; why 6-12 intervals for adolescents and 12-18 intervals for adults?

The most of the problem is in the person itself (poor oral hygiene and bad dietary habits),it’s a patient issue rather than a tooth issue (immature enamel )

-the intervals in the guidelines are not strict , they are rough

-periodontitis is different from caries , it doesn’t have a clear stages, also it’s natural history varies , may be hormone related or genetically related…so you have to trust your probe and do a full examination and get all the indexes , after that you supplement your work with a radiograph if needed clinically , so radiographs are not included in the typical protocol in the follow up of perio diseases