“Radiographic Assessment of the Pediatric Patient”

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Special considerations

1. Risk assessment
   - Evidence of caries/hx
   - Trauma
   - Anomalies
   - Fluoride status
   - Diet

AAPD guidelines for radiographs

- Based on Age and risk assessment

Child preparation and management

- Euphemisms
- Role models
- Contour film
- Gag reflex - distraction
- Parental help
- Bad taste

Film Sizes

- Sizes 0,1,2, occlusal/lateral

Radiographic Tools

- Snap-a-ray
- Bite wings, periapicals
Radiographic techniques

1. Bite wings
2. Periapicals (not p.a.’s)
3. Max/mand occlusals
4. Extraoral/lateral film
5. Soft tissue x-ray
6. Panoramic radiographs

Bite Tabs

Bite wing x-ray

- Mesial surface of canine to distal surface of 1st permanent molar

Bite wing x-ray

- Incipient carious lesion.
- Overlapping – common error

Occlusal Radiographs

Occlusal Radiographs

- Posterior max. occlusal radiograph
Extra Oral film

- Lateral Film

Trauma

- Soft tissue Film
- Indicated after trauma to locate missing piece(s) of fractured tooth.

Panaramic radiograph

Radiographic diagnosis of dental anomalies

- Ankylosis

Anomalies

- Gemination: unsuccessful attempt of an individual tooth bud to divide into two.

Anomalies

- Dilaceration
Anomalies

- Peg lateral
- Supernumary primary lateral

Anomalies

- Fusion: dentinal union of two teeth.
- Supernumary tooth
- Missing lateral

Anomalies

- Concrescence: fusion with a cemental union.

Anomalies

- Amelogenesis Imperfecta
  - Thin enamel
  - Increased dentin

Anomalies

- Unfavorable resorptive pattern of roots.

Pathology

- Retained primary root tips.
Pathology
- Furcation involvement

Pathology
- Furcation involvement with internal root resorption.

Pathology
- Internal resorption with furcation involvement.

Artifacts/optical illusions
1. Cervical burnout
2. Mach band phenomenon

- It may take 30%-70% demineralisation to occur before it can be evidenced radiographically.
- Radiographs are 2D views of 3D objects.

THANK YOU!