

CHAPTER 19

DIFFERENTIAL DIAGNOSIS OF COMMON LESIONS

1. PERIAPICAL RADIOLUCENCIES

Granuloma

Radicular cyst

Abscess

Apical scar

Surgical defect

Periodontal disease

Chronic suppurative osteomyelitis

Periapical cemental dysplasia (osteolytic stage)

Cementoblastoma (osteolytic stage)

Cementifying and ossifying fibromas (osteolytic stage)

Odontogenic and nonodontogenic cysts

Odontogenic and nonodontogenic benign tumors

Malignant tumors

2. PERIAPICAL RADIOPACITIES

Periapical cemental dysplasia (calcified stage)

Cementoblastoma (calcified stage)

Cementifying and ossifying fibromas (calcified stage)

Condensing osteitis

Osteosclerosis

Socket sclerosis

Florid osseous dysplasia (diffuse cementosis)

Tori

Hypercementosis

3. PERICORONAL RADIOLUCENCIES

Do **NOT** contain radiopacities:

- Follicular space
- Dentigerous cyst
- Unicystic (mural) ameloblastoma
- Odontogenic keratocyst
- Ameloblastoma
- Ameloblastic fibroma

MAY contain radiopacities:

- Ameloblastic fibro-odontoma
- Adenomatoid odontogenic tumor
- Calcifying epithelial odontogenic tumor (Pindborg tumor)
- Calcifying odontogenic cyst (Gorlin cyst)

4. SOLITARY CYSTLIKE RADIOLUCENCIES

Normal anatomy and Variations

- Tooth follicle (early stage)
- Large marrow space (wide inter-trabecular space)
- Post extraction socket
- Surgical defect

Odontogenic cysts:

- Primordial
- Lateral periodontal
- Residual
- Odontogenic keratocyst

Fissural cysts:

Incisive canal (nasopalatine)
Globulomaxillary
Median palatine
Median mandibular

False cysts:

Traumatic bone cyst
Stafne bone cavity

Odontogenic tumors:

Ameloblastoma
Odontogenic adenomatoid tumor
Calcified epithelial odontogenic tumor(Pindborg tumor)
Ameloblastic fibroma
Cementifying and ossifying fibromas (osteolytic stage)

Giant cell and nonodontogenic tumors:

Central giant cell granuloma
Giant cell lesion of hyperparathyroidism
Non-odontogenic benign tumors

5. SOLITARY RADIOLUCENCIES WITH DIFFUSE IRREGULAR BORDERS

Chronic alveolar abscess
Chronic osteomyelitis
Osteoradionecrosis
Squamous cell carcinoma
Metastatic tumors to the jaws
Fibrous dysplasia (early stage)
Histiocytosis X

Osteosarcoma and chondrosarcoma

Ewing's sarcoma

Burkitt's lymphoma

6. **MULTILOCCULAR RADIOLUCENCIES**

Cysts:

Odontogenic keratocyst (basal cell nevus syndrome)

Aneurysmal bone cyst

Tumors:

Ameloblastoma

Odontogenic myxoma

Central hemangioma of bone

Metastatic tumors to the jaws

Others:

Cherubism

Central giant cell granuloma

Giant cell lesion of hyperparathyroidism

7. **SOLITARY RADIOPACITIES**

Exostoses and tori

Osteoma

Retained root

Osteosclerosis

Socket sclerosis

Mature cementoma

- Complex composite odontoma
- Compound composite odontoma
- Calcifications in soft tissue
- Foreign objects in the jaws
- Fibrous dysplasia
- Garré's osteomyelitis

8. MIXED RADIOLUCENT - RADIOPAQUE LESIONS

Inflammatory:

- Condensing osteitis

Osteomyelitis:

- Chronic suppurative osteomyelitis
- Tuberculous osteomyelitis
- Syphilitic osteomyelitis
- Actinomycotic osteomyelitis
- Osteoradionecrosis

Cementomas (intermediate and calcified stages):

- Periapical cemental dysplasia
- Cementifying and ossifying fibroma
- Cementoblastoma
- Florid osseous dysplasia (diffuse cementosis)

Others:

- Fibrous dysplasia
- Paget's disease
- Osteosarcoma
- Chondrosarcoma
- Osteoblastic metastatic carcinoma

Pericoronal mixed lesions:

Ameloblastic fibro-odontoma

Odontogenic adenomatoid tumor

Calcifying epithelial odontogenic tumor (Pindborg tumor)

Calcifying odontogenic cyst (Gorlin cyst)

9. **GENERALIZED RADIOPACITIES**

Florid osseous dysplasia (diffuse cementosis, sclerotic cemental masses)

Paget's disease

Osteopetrosis

Gardner's syndrome

Infantile cortical hyperostosis

Albright's syndrome