

## Differential Diagnosis of Radiopaque Lesions

Below is a summary of the most common conditions that present as radiopacities on radiographs:

### Cementoma

Most common in African American middle-aged females. Usually occurs in anterior mandibular teeth. All teeth are responsive to pulp testing. Early lesion(s) is radiolucent but becomes radiopaque over time (months to years). Usually multiple lesions are present. Patients are asymptomatic.

### Condensing Osteitis

Reaction of periradicular bone to chronic inflammation of pulp. Patient is asymptomatic unless pulp is acutely inflamed. Teeth usually respond to pulp testing in early stages.

### Fibrous Dysplasia

Occurs in younger patients primarily. Very slow growing lesion. May occur as monostotic (fibrous dysplasia) or polyostotic (Albright's syndrome) form. More frequently in maxilla. Radiographic presentation is classical for "ground glass appearance."

### Odontoma

Unusual presentation of radiopacities composed of enamel, dentin, and cementum.

### Ossifying Fibroma

More common in young adults. Primarily found in the posterior mandible. Begin as radiolucencies and become calcified or cementified over time. Very slow growing. Patients are asymptomatic. Often have expansion of the mandibular bone and displacement of teeth.

### Osteoblastoma (Cementoblastoma)

Usually occurs in the mandibular posterior region. Can cause resorption of tooth structure. Can cause expansion of the bone. Has characteristic radiolucent border around a radiopaque mass.

### Osteosarcoma

Mandible more commonly affected than maxilla. Not uncommon for patients to have symptoms (pain, swelling, expansion of bone) similar to pulpal pathosis. True malignant tumor. Classical "sunburst" appearance of radiopaque lesion is uncommon.