

Odontogenic tumors:

1. tumor of odontogenic epithelium (5): ameloblastoma, AOT, CEOT, SOT, clear cell odontogenic carcinoma
2. tumor of odontogenic ectomesenchyme (4): odontogenic fibroma, odontogenic myxoma, granular cell odontogenic tumor, cementoblastoma
3. mixed odontogenic tumors (4): ameloblastic fibroma, ameloblastic fibroodontoma, ameloblastic fibrosarcoma, odontoma

Odontogenic tumor	Age	Gender	Location	Clinical features	Radiographic features	Differential diagnosis
Ameloblastoma				slow-growing, locally invasive		
1. Conventional solid/multicystic (86%)	20-70 rare <10	-	mandible, molar-ascending ramus	asymptomatic, painless swelling or expansion of the jaw	multilocular radiolucent; soap bubble (large), honeycombed (small); usu. associated with an unerupted third molar	CEOT, odontogenic myxoma; OKC, dentigerous cyst; benign nonodontogenic lesion
Desmoplastic variant	-	-	anterior maxilla	-	mixed radiolucent and radiopaque appearance; resembles a fibro-osseous lesion	-
2. Unicystic (13%)	23	-	posterior mandible	asymptomatic	circumscribed radiolucent that surrounds the crown of an unerupted mandibular third molar	if associated with unerupted third molar – like a dentigerous cyst
3. Peripheral (1%)	middle-aged, 52	-	mandible, posterior gingival and alveolar mucosa	a painless, nonulcerated sessile or pedunculated gingival or alveolar mucosal lesion; most <1.5 cm	-	-

Adenomatoid odontogenic tumor	10-19 younger patient	F	anterior maxilla	asymptomatic; < 3 cm; small, sessile masses on the facial gingiva of the maxilla	circumscribed unilocular radiolucent; may contain fine (snowflake) calcifications Follicular type: associated with unerupted tooth (usu. canine) Extrafollicular type: between erupted teeth	dentigerous cyst, lateral periodontal cyst, COC, CEOT
Calcifying epithelial odontogenic tumor (Pinborg tumor)	30-50	-	posterior mandible	painless, slow-growing swelling	multilocular radiolucent; scalloped margins; contain fine calcifications around the crown; frequently associates impacted tooth (third molar)	radiolucent: dentigerous cyst, OKC, ameloblastoma, odontogenic myxoma; mixed: COC
Squamous odontogenic tumor	38	-	-	painless or mildly painful gingival swelling; often associated with mobility of the associated teeth	not specific or diagnostic	-
Clear cell odontogenic carcinoma	>50	-	-	-	unilocular or multilocular radiolucent	-
Odontogenic fibroma						
Central type	40	F	maxilla: anterior to first molar; mandible: posterior to the first molar	cortical expansion	Small: well-defined unilocular radiolucent, often associated with the periradicular area of erupted teeth Large: multilocular radiolucent; root resorption or divergence is common; 12% may contain radiopaque flecks	the same as those of the ameloblastoma

Peripheral type	wide age range	-	facial gingiva of the mandible; 0.5-1.5 cm; infrequently cause displacement of the teeth	firm, slow-growing, sessile gingiva mass covered by normal-appearing mucosa	some may show calcifications; do not involve the underlying bone	-
Odontogenic myxoma	20-30; young adult	-	mandible	asymptomatic or painless expansion	multilocular radiolucent; with irregular, scalloped margin ; residual bone trabeculae form a “ stepladder pattern ” arranged at right angles to another	the same as those of the ameloblastoma; honeycomb: hemangioma
Granular cell odontogenic tumor	>40; adults	-	mandible, premolar and molar area	asymptomatic or painless, localized expansion	well-demarcated radiolucent; unilocular or multilocular; may show some calcifications	-
Cementoblastoma	children, young adult	-	mandible, premolar and molar area; 50% involve 1st molar	2/3 pain and swelling	radiopaque mass fused to one or more tooth roots, surrounded by a thin radiolucent rim	odontoma, osteoblastoma, focal sclerosing osteomyelitis, hypercementosis
Ameloblastic fibroma	<20, younger patients	M	70% posterior mandible	-	unilocular or multilocular radiolucent; well-defined, sclerotic margins; 75% associated with an unerupted tooth	ameloblastoma, odontogenic myxoma, dentigerous cyst, OKC, CGCG, histiocytosis
Ameloblastic fibro-odontoma	10, rare in adults	-	posterior regions of the jaws	asymptomatic	well-circumscribed unilocular (rarely, multilocular) radiolucent that contains calcified material; most associated with an unerupted tooth	CEOT, COC, developing odontoma, AOT

Ameloblastic fibrosarcoma	27.5, younger patients	M	80% mandible	pain, swelling, rapid clinical growth	ill-defined, destructive radiolucent	-
Odontoma	14	-	maxilla; compound: anterior; complex: posterior	the most common type of odontogenic tumor; asymptomatic	surrounded by a narrow radiolucent zone; Compound: multiple, small toothlike structures; Complex: calcified mass; frequently associated with an unerupted tooth	focal sclerosing osteitis, osteoma, periapical cemental dysplasia, ossifying fibroma, cementoblastoma