

原文題目(出處):	Ameloblastomatous CCOT: A case report of a rare variant of CCOT with a review of the literature on its diverse histopathologic presentation. Case Rep Dent 2013, Article ID 407656
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內文:

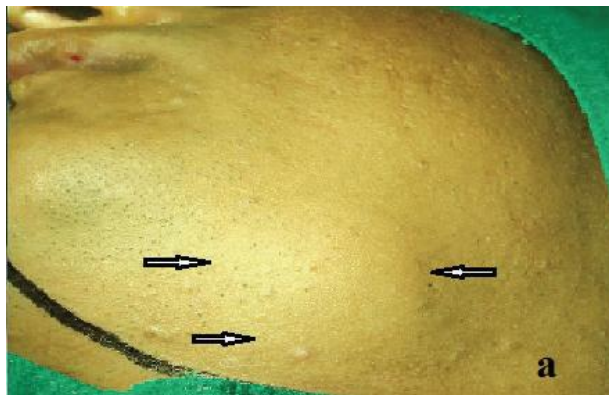
Introduction:

Calcifying cystic odontogenic tumor(CCOT):

1. 又名 Calcifying odontogenic tumor, Golin Cyst
2. 為一罕見的 odontogenic tumor,佔所有 jaw cysts 的 1%
3. 大部分的 case 為 cystic、nonneoplastic, 少部分為 solid lesion、neoplastic
4. 常與其他 odontogenic tumor 伴隨出現, 例如: ameloblastoma, odontoma
5. 與 ameloblastoma 伴隨出現時, 又分為兩種: (by Hong et al.)
 - * Ameloblastomatous cystic
 - * neoplastic variants associated with ameloblastoma
6. 以下介紹一罕見 Ameloblastomatous CCOT 的 case

Case report of Ameloblastomatous CCOT:

- 20 歲
- Chief complaint: lower left 1/3 of face 腫大持續 2 年
- Extraoral examination:



swelling

Site: lower left back tooth region of the jaw、mandible angle

Extent:

Antero-posteriorly: 從 2cm distal to the angle of mouth 到 the ramus of mandible

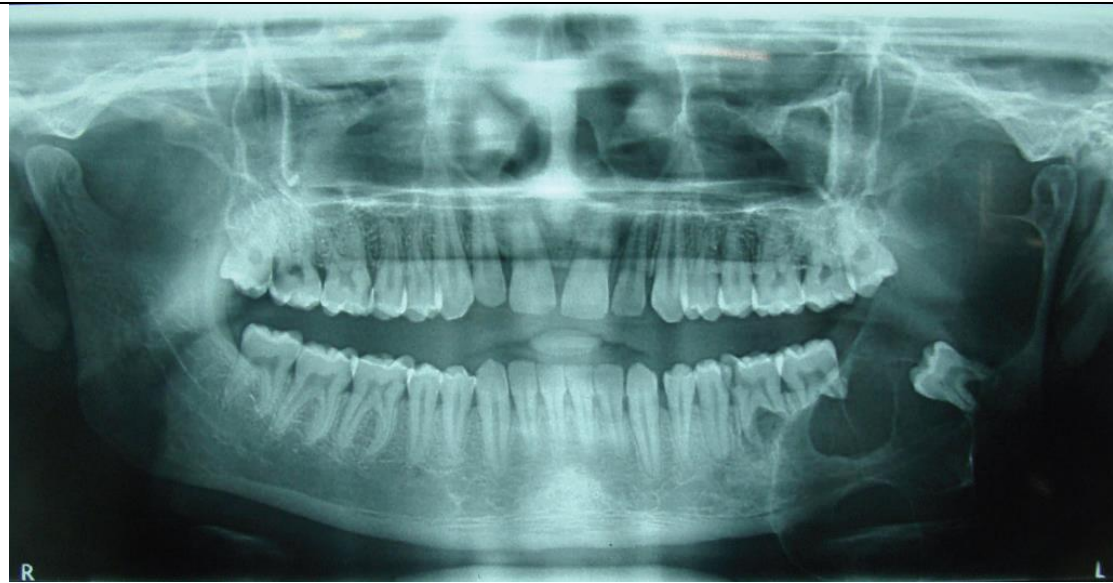
Supero-inferiorly: 從 zygomatic arch 下 3mm 到 lower border of the mandible 上 1mm

- Intraoral examination:

Swelling extent: 從左下第一大白齒到 the ramus of the mandible

骨頭有 Bucco-lingual expansion, Mucosa 沒有受損

- Panorex finding:



左側下顎白齒區到 condyle and coronoid area 有 multilocular radiolucency
病灶包含一未萌發的第三大白齒，移位到 the angle of mandible.

First molar、Second molar: 牙根吸收

-CT scan finding:

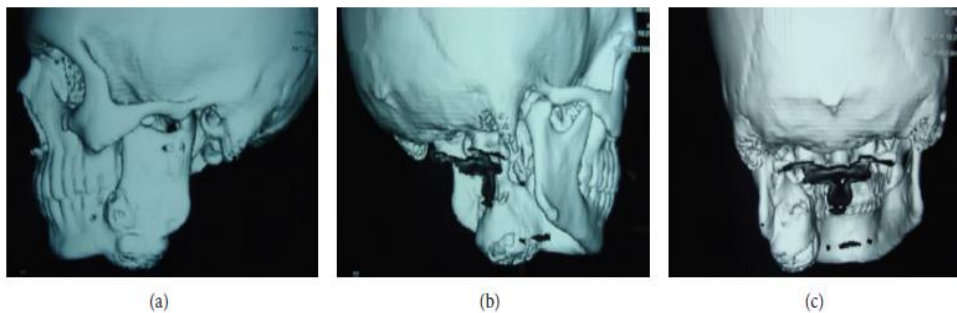


FIGURE 3: 3D CT image showing the lesion in the body and ramus of the mandible, (a) left lateral surface, (b) lingual surface of left mandible, and (c) lingual surface of mandible from the posterior view.

large cystic, and expansile lesion :位在 left ramus of mandible, 皮質骨有變薄的現象

- Provisional diagnosis: Ameloblastoma or odontogenic keratocyst

- Histopathologic examination by incisional biopsy:

Lining epithelium:

Basal cell layer 的細胞有 reverse polarity

覆蓋其上較疏鬆的 epithelium, 類似 stellate reticulum

- Provisinal diagnosis: Cystic Ameloblastoma

- Treatment:



FIGURE 4: (a) Surgical photograph showing hemimandibulectomy and (b) condylar reconstruction plate. hemimandibulectomy with disarticulation, 用 condylar reconstructive plate 固定 - Histopathologic examination by hemimandibulectomy(H/E stain):

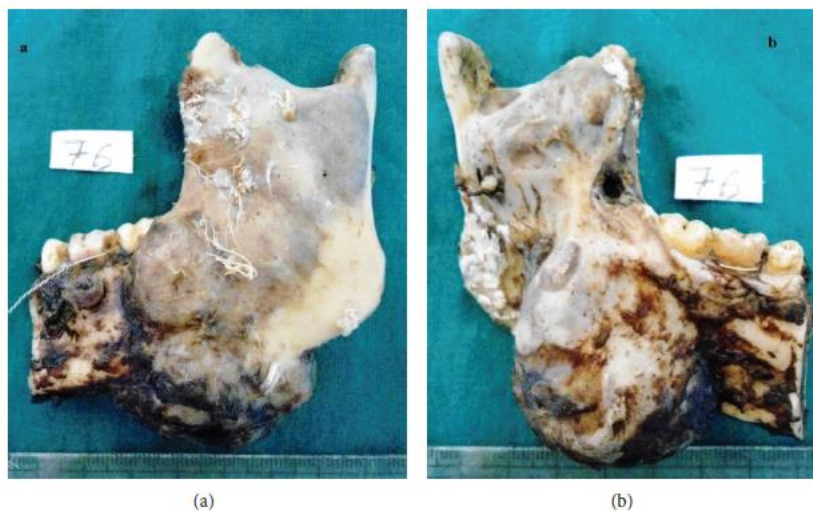


FIGURE 5: Resected mandible sent for histopathologic examination, (a) lateral surface, and (b) medial surface of the mandible. Ghost cell:看起來像是沒有細胞核的表皮細胞，顏色為 eosinophilic，鈣化是常見的

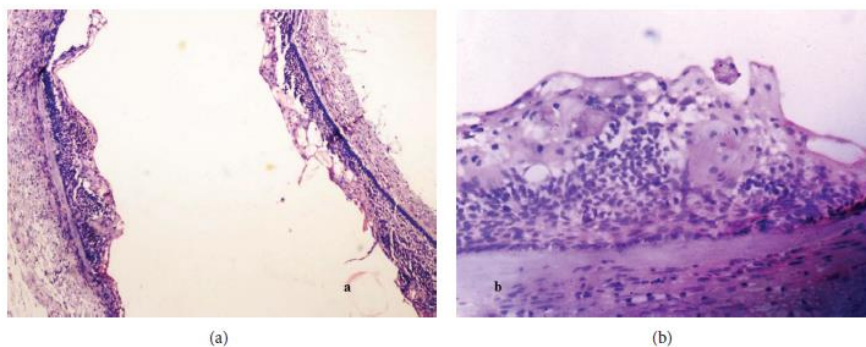


FIGURE 6: H & E stained section showing cystic lining with ghost cells and stroma with dysplastic dentin, (a) magnification x40, (b) magnification x400. 靠近表皮處也可見到 eosinophilic matrix 為 dysplastic dentin(dentoid)



在 connective tissue capsule 可以看到包含 ghost cells 的 proliferative odontogenic island，低倍下可見到些許的 daughter cyst 在 fibrous wall 中
 - Final diagnosis: Ameloblastomatous CCOT
 - Regular 1-yr follow up: recurrence free.

Calcifying cystic odontogenic tumor(CCOT):

別名	Calcifying odontogenic cyst、Golin cyst
Sex predilection	無
Age predilection	多在 20~30 歲被診斷
Site predilection	上下顎均等，多發生在前牙區(65%)，上顎前牙區又比下顎前牙多
Symptom and sign	無
Intraosseous /extraosseous	多為 Intraosseous(70%)
Radiographic features	1. 多為 unilocular，5~13% 為 multilocular 2. 病灶初期影像為 RL，成熟後為一 RL/RO mixed image 3. RO 影像三種形式： Salt and pepper、fluffy cloud-like、crescent-shaped 4. 常伴隨 unerupted tooth 5. 鄰近的牙齒有牙根吸收的現象 6. 有時會有 local expansion 7. 有些下顎的 case 病灶會過中線
Histopathologic features	(80%~98% 為 cystic form、nonneoplastic form)

	<p>1.epithelium 出現 ghost cell:外觀看起來像沒有細胞核的表皮細胞，顏色為 eosinophilic，鈣化是常見的</p> <p>2. Basal cell layer 的細胞有 reverse polarity 類似 ameloblast，覆蓋其上較疏鬆的 epithelium，類似 stellate reticulum</p> <p>3. 靠近表皮處也可見到 eosinophilic matrix 為 dysplastic dentin(dentoid)</p> <p>4.在 fibrous wall 有 odontogenic island</p> <p>5. 低倍下可見到些許的 daughter cyst 在 fibrous wall 中</p> <p>6. 常與其他 odontogenic tumor 一起出現：ameloblatoma、odontoma、adenomatoid odontogenic tumor</p>
Classification (Pretorius et al. 2006)	<p>Group 1: simple cysts</p> <p>Group 2: benign neoplasms</p> <p>Group 3: solid benign odontogenic neoplasms, with dentinoid formation</p> <p>Group 4: malignant odontogenic neoplasms</p>
與 ameloblatoma 伴隨出現時，又分為兩種:(by Hong et al.)	<p>* Ameloblastomatous cystic variant: unicystic、ghost cell with dystrophic calcification、Intraosseous</p> <p>* neoplastic variant: Transformed ameloblastomatous epithelium potion:少見 ghost cell 鈣化</p>

題號	題目
1	Which the following disease is not most common associated with Calcifying cystic odontogenic tumor (CCOT) ? (A) Ameloblastma (B) Odontoma (C) Glandular odontogenic cyst (D) Adenomatoid odontogenic tumor
答案(C)	出處：Neville, Oral and Maxillofacial Pathology, Third edition P.695
題號	題目
2	Which the following histopathologic feature is not commonly seen in Calcifying cystic odontogenic tumor (CCOT) ? (A) Fibrous capsule (B) Amyloid-like material (C) Ghost cells with calcification (D) Dentinoid
答案(B)	出處：Neville, Oral and Maxillofacial Pathology, Third edition P.696~P.697