

原文題目(出處)：	New features in mucous-ameloblastoma. A case report of rare entity. Int J Oral Craniofac Sci 2015;1;1:1-5
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內文：

Abstract:

- Histologically ameloblastoma showed various forms of metaplastic changes.
- Evidence of mucous cells is a rare finding and only 9 cases were reported.
- A case of 80 year old male suffered from mandibular swelling for five years duration diagnosed as mucous ameloblastoma.
- Histopathological examination revealed a lot of mucous pools within the growth, a thin fibrous capsule surrounding the mass and a direct connection between growth islands and oral mucosa. This case highlights the features of rare type of ameloblastoma.

Introduction:

- Ameloblastoma (AB) is a well-known rare benign epithelial odontogenic tumor that more frequently involves the posterior region of the lower jaw at middle-aged male patient. Although it is slowly growing, it has local aggressive behavior and great tendency to recur if not properly excised. It has an unpredictable tendency to metastasize and required surgical en-bloc resection
- Different variants:  
solid / multicystic, extraosseous ameloblastoma, desmoplastic, unicystic type, beside malignant ameloblastoma and ameloblastic carcinoma
- Various forms of metaplasia:  
Follicular, plexiform, acanthomatous, granulomatous, desmoplastic and even containing unusual finding
- The occurrence of the mucous cells in AB is rare phenomenon, mucous cells have reported in about 9 cases
- This report describes a distinct case of long duration ameloblastoma in elder patient exhibiting numerous large pools of mucin and peripheral fibrous wall that make it well separated from the bone.

Case Report:

General data

- A-80-year old male
- right side facial swelling in cheek and submandibular area
- The condition started five years ago (2010) as a small mandibular swelling increased in size gradually

Clinical finding

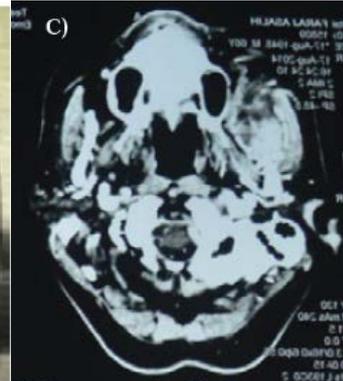
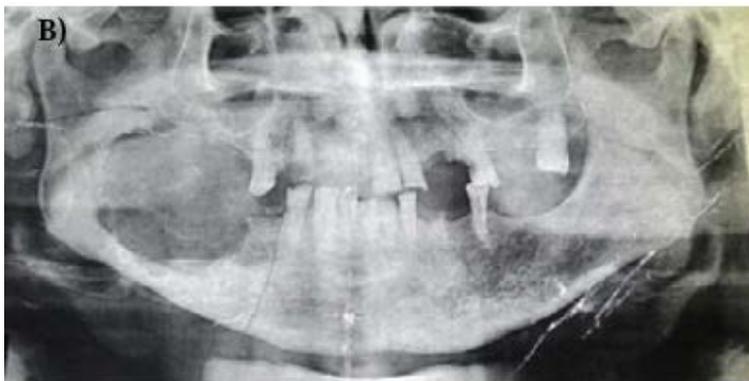
- a hard mass, measured about 5X4cm in 2012 and covered by normal skin and became bigger, measuring 7X5cm in 2015



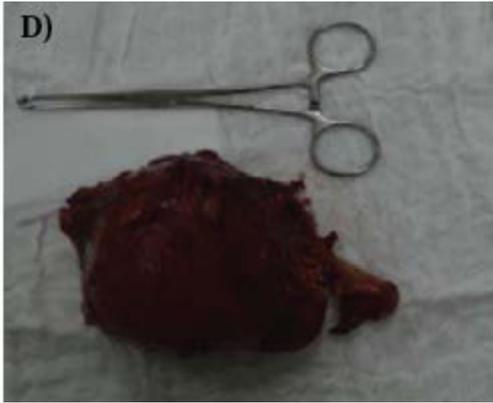
- no paresthesia of the mandibular nerve and no trismus
- The swelling exhibited diffuse margins and was painless and do not adhere to the overlying skin
- no lymph node palpable in the neck
- Intraorally, there was diffused swelling extending in an edentulous area from the distal surface of the mandibular right canine to the ramus antero-posteriorly obliterating the right buccal vestibule. The central area of the overlying mucosa showed large deep necrosis, the remaining mucosa stretched and erythematous



- Orthopantomography and CT examination revealed a large, well-defined unilocular radiolucency with a scalloped border and central septa. It extends from mandibular right edentulous premolar area to the ramus



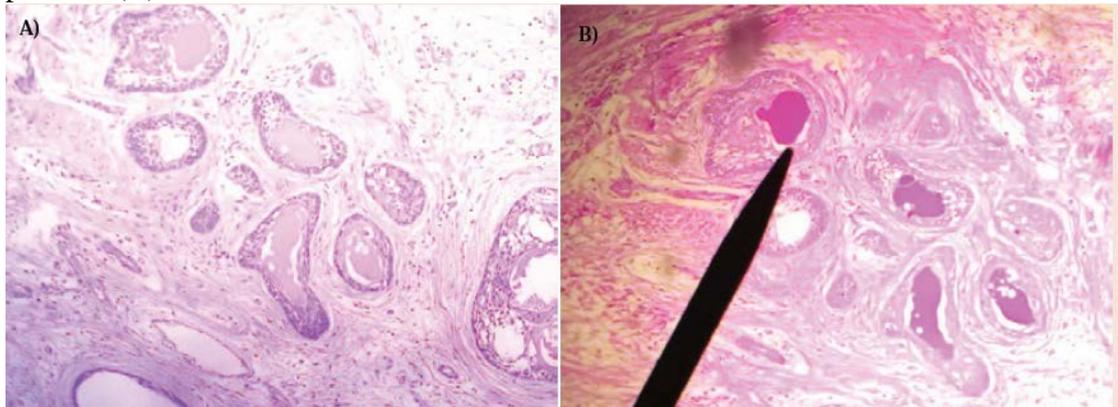
- Removed by surgical excision as an en-bloc resection (hemi mandibulectomy)



- Macroscopically, the specimen measured 12X9 cm. The mass was grayish-white in color, rubbery with a smooth surface. The cut surface showed nodular white-yellowish areas and numerous focal cystic spaces of variable sizes oozing thick mucinous material. The mass was well capsulated by thin smooth continuous wall.



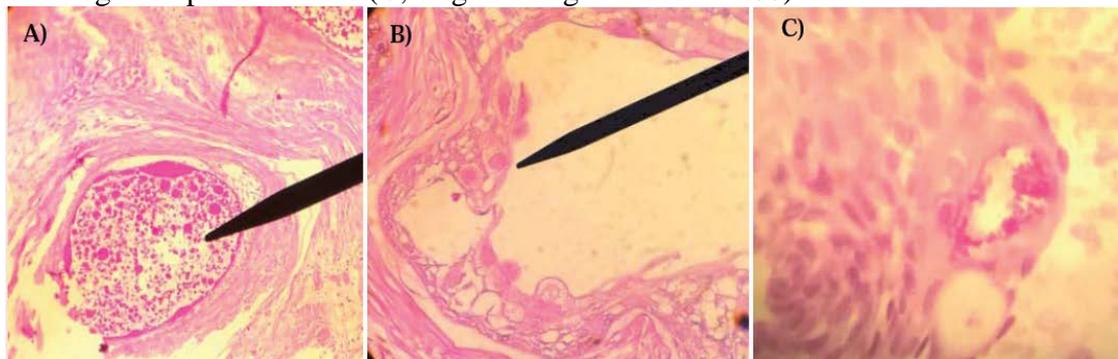
- Microscopically, photomicrograph is illustrating a mass predominated by numerous epithelial islands containing mucin pools (A) that proved to be PAS-D positive (B) Tumor stroma consists of a loose fibrous tissue



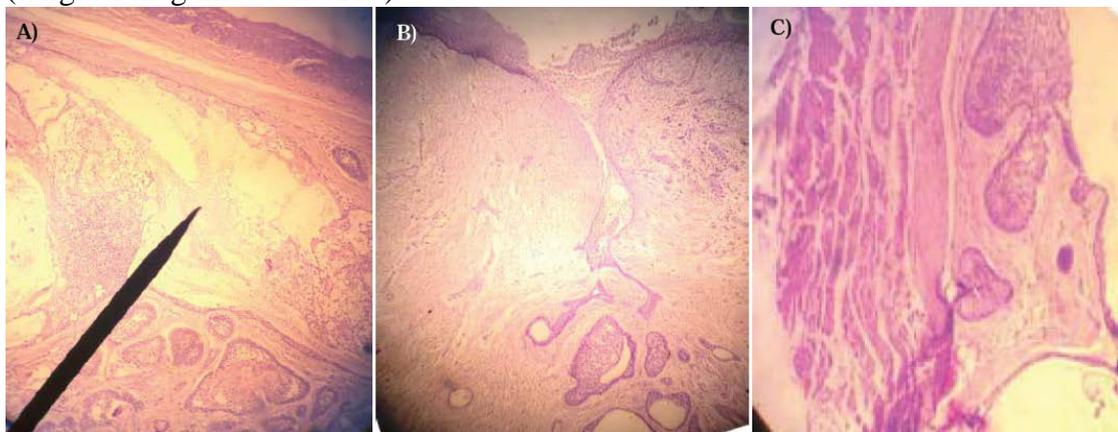
- Tumor islands consist of odontogenic epithelium surrounded by columnar cells with reversed polarity (ameloblast-like cells) enclosing central stellate reticulum-like cells (A). The mucous cells arranged as lining (B) with few papillary-like projections (C).



- Periodic acid–Schiff-diastase stained sections. Tumor contains large cystic spaces filled with mucin (A, original magnification x100). The mucin-positive cells in the lining (B, original magnification x100) and admixed with odontogenic epithelial cells (C, original magnification x 400).



- The mass covered superficially by oral epithelium (A) that connect with underlying odontogenic epithelial islands (B). Sections from the inferior border showed a continuous fibrous wall separates the mass from surrounding tissue (C) (Original magnification ×100).



Discussion:

- In comparison to the reviewed cases of ameloblastoma associated with mucous differentiation, the age of our patient was older than the maximum reported age (53 years female)
- The duration of previous cases varied from 2 months to 1.5 years, nevertheless our patient is elder patient and suffered longer period since its diagnosis (2years).
- Grossly During sample sectioning, a thick yellowish material was flowing down from multiple micro and macro cystic spaces that exist throughout the mass. other studies did not mention gross mucin; they identified it under microscope PAS-stained sections
- The upper surface of the mass was covered with oral mucosa, and histologically

there was a connection between the oral and odontogenic epithelial islands. No such finding was reported in the previous nine cases.

- The remaining microscopical descriptions do not much differ from other reports. There are squamous metaplasia and extensive cystic degeneration. The mucous cells located and arranged within solid islands, or as single or group admixed with epithelial lining. The only remarkable difference was the number of cells and the amount of secretion. Hence, we thought that this could be linked to the age of the lesion.
- Recent data indicated that the mucous cell in odontogenic cystic lesions have a mixed type of mucin (acidic, neutral or mixed). This finding resembles mucous cells from major salivary glands. More studies are needed to evaluate the immune profile of these mucous cells of odontogenic source
- There are three proposed theories explaining the transition of odontogenic epithelium from the usually non-mucous cells to mucin-producing cells. They include odontogenic metaplasia, grafting mucous cells from nasal cavity and maxillary sinus, and embryological epithelium residues.
- The numerous histologic patterns of AB believed to have no clinical relevance. Nevertheless, metastases usually follow multiple recurrences, unicystic ameloblastomas may behave less aggressively than multilocular lesions. Desmoplastic ameloblastoma and clear cell ameloblastoma are considered to be more aggressive
- The prediction of the prognosis of ameloblastoma with mucous cell differentiation is not established as only few cases have been published in the literature. Nevertheless, Yoon et al. expected that its prognosis is similar to unicystic ameloblastoma

Conclusion:

- More accumulative knowledge gained from adding a new case of mucous ameloblastoma. Based on the observations reported in this case, it occurred in elder patient with longer disease duration. It contained a large amount of mucous secretion within the growth and surrounded by thin fibrous capsule. This case highlight the rare type of ameloblastoma.

題號	題目
1	下列何種囊腫最可能發生造釉細胞瘤 (ameloblastoma) ? (A) 含齒囊腫 (dentigerous cyst) (B) 牙齦囊腫 (gingival cyst) (C) 根尖囊腫 (radicular cyst) (D) 側牙周囊腫 (lateral periodontal cyst)
答案 (A)	出處：Oral and Maxillofacial PATHOLOGY,3rd edition , Neville, et al P702
題號	題目
2	下列有關造釉細胞瘤 (ameloblastoma) 之敘述，何者錯誤？ (A) 好發於下顎骨大白齒-上升枝區域 (B) 臨床徵狀常為疼痛之腫大 (C) 最典型之 X 光特徵為多房性放射透性病灶 (D) 常伴有阻生第三大白齒及鄰牙根部吸收
答案 (B)	出處：Oral and Maxillofacial PATHOLOGY,3rd edition , Neville, et al P703

