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內文：

Introduction

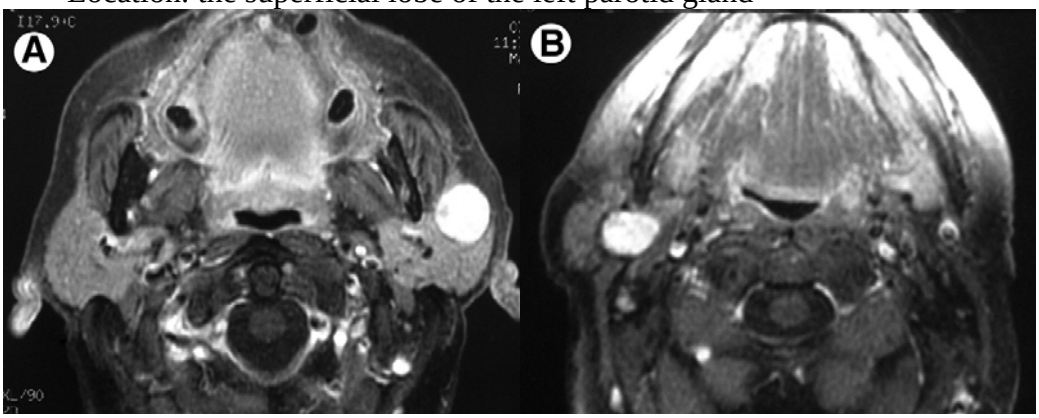
Basal cell adenomas (BCAs)

- Uncommon benign tumors of the salivary glands
- An independent entity in the second edition of the Salivary Gland Tumours Classification of the World Health Organization
- Approximately 1% to 2% of all salivary gland epithelial tumors
- Occurrence of bilateral basal cell adenomas is extremely rare

Case Report

Metachronous bilateral parotid BCA without coexisting dermal cylindroma

- 65-year-old woman
- For evaluation of a palpable mass in the left parotid region in 2003
- Hard, movable, and non-tender mass measuring about 3X2 cm
- No facial palsy or regional lymphadenopathy
- Fine-needle aspiration cytology: inconclusive
- Magnetic resonance imaging:
  - Well-defined and homogeneously well-enhanced mass
  - Location: the superficial lobe of the left parotid gland



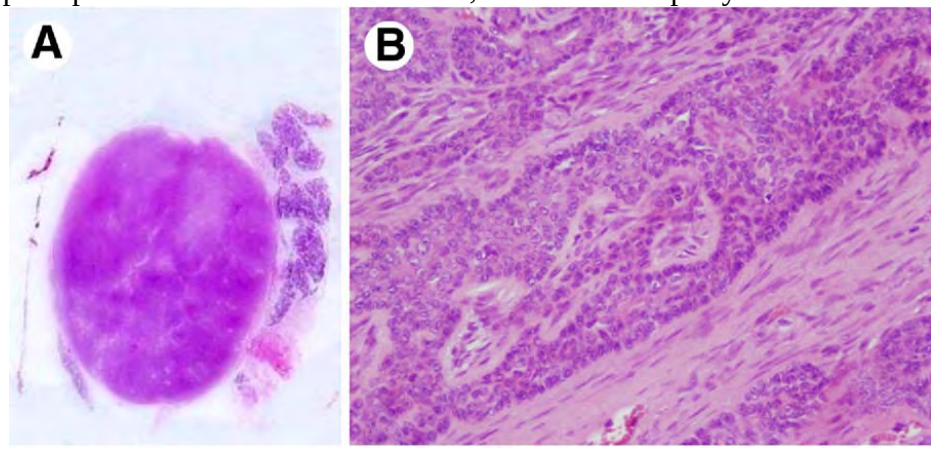
- A, Left parotid mass in the superficial lobe
- B, 3 years after first surgery: mass in the deep lobe of the right parotid gland
- No calcification or cystic component was seen within the tumor
- Suggestive of benign tumor of the parotid gland
- The gender of the patient and clinical manifestations of the lesion suggested a mixed tumor

1 month later

- Left superficial parotidectomy, including removal of the mass, with preservation of the facial nerve and its branches
- Microscopic examination:
  - Varying sized and shaped aggregates of epithelial tumor cells separated by amounts of stromal tissue

- The aggregates consisted of 2 layers of cells:
  - Dark cells: less cytoplasm and more basophilic nuclei
  - Light cells: some of them with 1 or more small basophilic nucleoli
- Some cuboidal ductal cells surrounding small lumens
- Inmunoreactivity to S-100 protein was localized to the peripheral tumor cells adjacent to the connective tissue stroma
- The histology was compatible with basal cell adenoma with predominant solid pattern with small areas of trabecular pattern

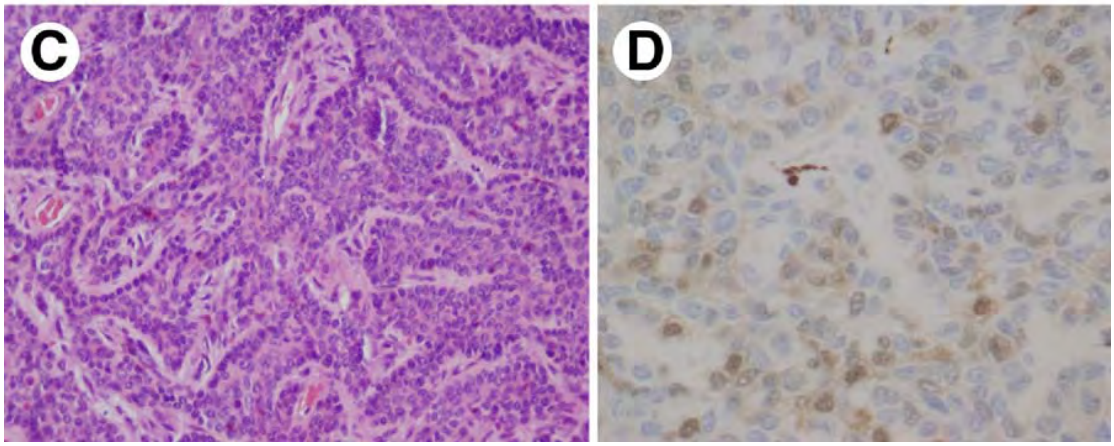
- The postoperative course was uneventful, without facial palsy



- A, Left intraparotid tumor nodule (hematoxylin-eosin): Uniform histologic appearance dominated by basaloid cells
- B, Histologic examination of the left tumor: Basaloid epithelial cells in large irregular-shaped sheets (hematoxylin-eosin stain X200)

3 years follow-up after surgery

- Complaining of swelling in the right parotid gland
- Physical examination:
  - Elastically hard and poorly defined right parotid mass
  - Fine-needle aspiration cytology: nondiagnostic
  - MRI revealed a right parotid mass in the caudal portion of the deep lobe
  - T2-weighted images: homogeneous moderate intensity
  - With the suspected diagnosis of basal cell adenoma, right conservative parotidectomy was performed with facial nerve preservation
  - Histology: small, slightly separated nodules of basaloid cells in an insular pattern, compatible again with basal cell adenoma with solid pattern
  - Celularity in the immunohistochemical analysis was again focally positive to S-100.
- No complications and no sign of recurrence after 1 year of follow-up



- C, Histologic examination of the right tumor showing characteristics typical of basal cell adenoma: aggregates of epithelial tumor separated by stromal tissue (hematoxylin-eosin stain ×200)
- D, Immunohistochemistry revealed positivity for S-100 protein in stromal cells of the right tumor (×400).

Discussion

Basal cell adenoma

- Benign epithelial neoplasm with a uniform histologic appearance dominated by basaloid cells and without the myxo-chondroid tissue characteristic of mixed tumor
- More than 80% of BCAs arise in the major salivary glands, the majority occurring in the parotid gland
- 2% to 4% of all primary salivary gland tumors
- Arise almost exclusively in adults
- Average age: 57.7 years
- Female predominance, female:male = 2:1, except in the case of membranous basal cell adenoma (male preponderance)
- Slowly enlarging, asymptomatic, freely movable mass
- Greatest dimension: usually < 3 cm

The bilateral occurrence of parotid tumors

- Rare, accounting for 1% to 3% of all parotid tumors
- The most common tumor to occur bilaterally: Warthin's tumor, 5% to 10% of all Warthin's tumors

Table 1. REPORTED CASES OF BILATERAL PAROTID BASAL CELL ADENOMAS IN THE ENGLISH-LANGUAGE LITERATURE

Reference	Age (yrs)	Gender	Dermal Cylindromas	Occurrence of BCAs
Reingold et al,[3] 1977	43	M	Yes	Metachronous
Herbst and Utz,[4] 1984	54	F	Yes	Metachronous
Zarbo et al,[5] 1985	58	M	Yes	Synchronous
Schmidt et al,[6] 1991	72	F	Yes	Metachronous
Katsuno et al,[7] 2000	65	F	No	Synchronous
Suzuki et al,[8] 2000	65	F	No	Synchronous
Reddy et al,[9] 2008	55	F	No	Synchronous
Our case 2008	65	F	No	Metachronous

Abbreviations: F, female; M, male.

Junquera et al. Bilateral Parotid Basal Cell Adenoma. J Oral Maxillofac Surg 2010.

- The occurrence of bilateral BCAs of the parotid glands is unusual
- Notable similarity between dermal eccrine tumors (eccrine spiradenoma and cylindroma) and BCAs, and a diathesis of both tumors has been reported
- The histologic features of BCAs and skin tumors were similar and their synchronous occurrence may result from a single pleotropic gene that acts on

ontogenetically similar stem cells

- Most of the BCAs associated with dermal tumors were the membranous type, and most of the dermal tumors were cylindroma
- Histologically, BCAs have various variants, including solid, trabecular, tubular, and membranous variants
- Although the most common type is the solid variant, individual tumors commonly display a combination of several growth patterns
- BCAs are composed of 2 types of cells:
  1. Small cell with scant cytoplasm and a round basophilic nucleus
  2. Large cells with eosinophilic cytoplasm and oval nuclei
- BCA subtypes appear microscopically basaloid and monomorphic in architectural patterns compared with pleomorphic adenoma, periductal, epithelioid, and spindled (stromal-like) myoepithelial cells contribute to the proliferation of these tumors
- Positivity for S-100 protein indicates the myoepithelial nature of these tumor cells
- BCAs are amenable to conservative resection such as superficial parotidectomy
- The recurrence rate for the solid and trabecular-tubular variants is almost nonexistent

Membranous type of BCAs

- Most commonly associated with recurrence: 25% to 37%
  ➔ May be a result of the multicentricity of this lesion rather than to true recurrences, although rare, malignant transformation is more common in the membranous type
- Male preponderance, multicentric development, absence of capsule in 50% of cases, association with eccrine tumors, and malignant transformation
- Differential diagnosis with entities of varied prognosis such as pleomorphic adenoma, adenoid cystic carcinoma, and basal cell adenocarcinoma makes necessary the consideration of this entity in the field of glandular tumors of the maxillofacial area

題號	題目
1	在下列各個subtype中，哪幾種subtype可出現在Basal cell adenoma? 1. Solid subtype 2. Trabecular subtype 3. Membranous subtype 4. Tubular subtype 5. Cribriform subtype (A) 1, 2, 3 and 4 (B) 1, 2, 3 and 5 (C) 1, 2, 4 and 5 (D) 1, 3, 4 and 5
答案(A)	出處：Oral & Maxillofacial Pathology, 2nd edition, P.417-418 and In this journal
題號	題目
2	下列何者對於Basal cell adenoma的敘述是錯的?
	(A) Clinically, the basal cell adenoma presents as a slowly growing, freely movable mass similar to a pleomorphic adenoma. (B) The tumor can occur at any age but is most common in middle-aged and older adults, with a peak prevalence in the seventh decade of life. (C) The tumor appears to be more common in males, with some studies showing as high as a 2:1 male-to-female ratio. (D) Recurrence is rare for most histopathologic subtypes. However, the membranous subtype has a 25 to 37% recurrence rate, possibly related to its multifocal nature.
答案(C)	出處：Oral & Maxillofacial Pathology, 2nd edition, P.417-418