原文題目(出處)：	My journey into the world of salivary gland sebaceous neoplasms. Head and Neck Pathol 2012; 6:101-10
原文作者姓名：	Douglas R Gnepp
通訊作者學校：	Pathology Department, Rhode Island Hospital, Warren Alpert, Medical School at Brown University
報告者姓名(組別)：	危薇 Intern C 組
報告日期：	2012/11/06

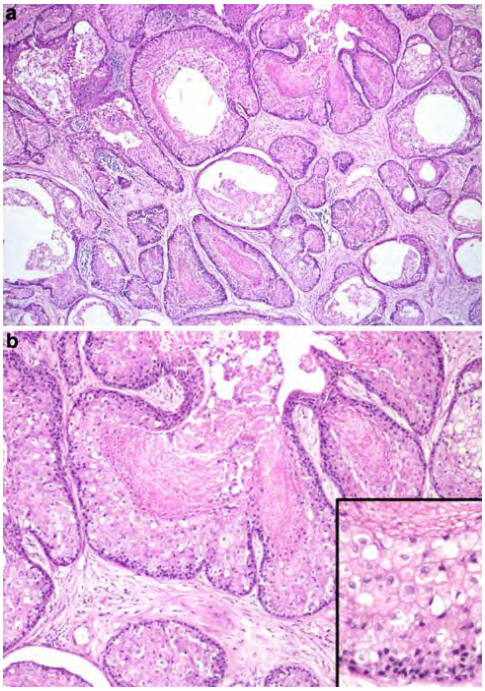
內文：

Sebaceous Lesions

1. Parotid gland (10–42% of glands); submandibular glands (5–6% of glands)
2. Intraoral sebaceous glands, known as Fordyce granules, are found in up to 80% of individuals,most frequently on the buccal mucosa or vermilion border of the upper lip and less frequently in the retromolar and anterior tonsillar pillar region
3. Normal anatomic variant and may vary in number from a few to several hundred
4. Non-polyposis colorectal cancer syndrome (HNPCC or Lynch syndrome): 50- to 90-fold → activation
5. Hyperplastic: 15 or more lobules
6. Salivary gland sebaceous neoplasms are classified histologically into five groups: sebaceous adenoma, SL, sebaceous carcinoma, sebaceous lymphadenocarcinoma, and sebaceous differentiation in other tumors.
7. The most frequent sebaceous tumor is SL followed by sebaceous carcinoma and sebaceous adenoma, with the least frequent being sebaceous lymphadenocarcinoma.
8. Not appear to be any increased risk of developing a visceral carcinoma in patients with salivary gland sebaceous tumors.(cutaneous sebaceous neoplasms)

Sebaceous Adenoma

1. Rare, benign tumor(0.1% of all salivary gland neoplasms)
2. Mean age: 59 years (range, 22–90 years) male-to-female ratio of 4:3
3. The major salivary glands (48% parotid, 13% submandibular gland), and 39% in the minor salivary glands (19% in the buccal mucosa, 13% in the area of the lower molars or retromolar region and 7% in other intraoral sites)
4. Size: from 0.4 to 6.0 cm in greatest dimension, encapsulated or sharply circumscribed, varying in color from grayish-white to pinkish-white to yellow or yellowish-gray
5. These tumors are composed of sebaceous cell nests, often with areas of squamous differentiation. Atypia and pleomorphism are minimal and there is no tendency to invade local structures
6. Many tumors are microcystic or composed of dilated salivary ducts with foci of sebaceous differentiation
7. Demonstrate marked oncocytic metaplasia, and histiocytes or foreign body giant cells



a. Sebaceous adenoma is composed of variably-sized and shaped nests of sebaceous cells with areas of cystic change. b. Higher power of a demonstrating vacuolated cytoplasm with central holocrine secretory material. Inset: High-power detail of sebaceous cyst lining

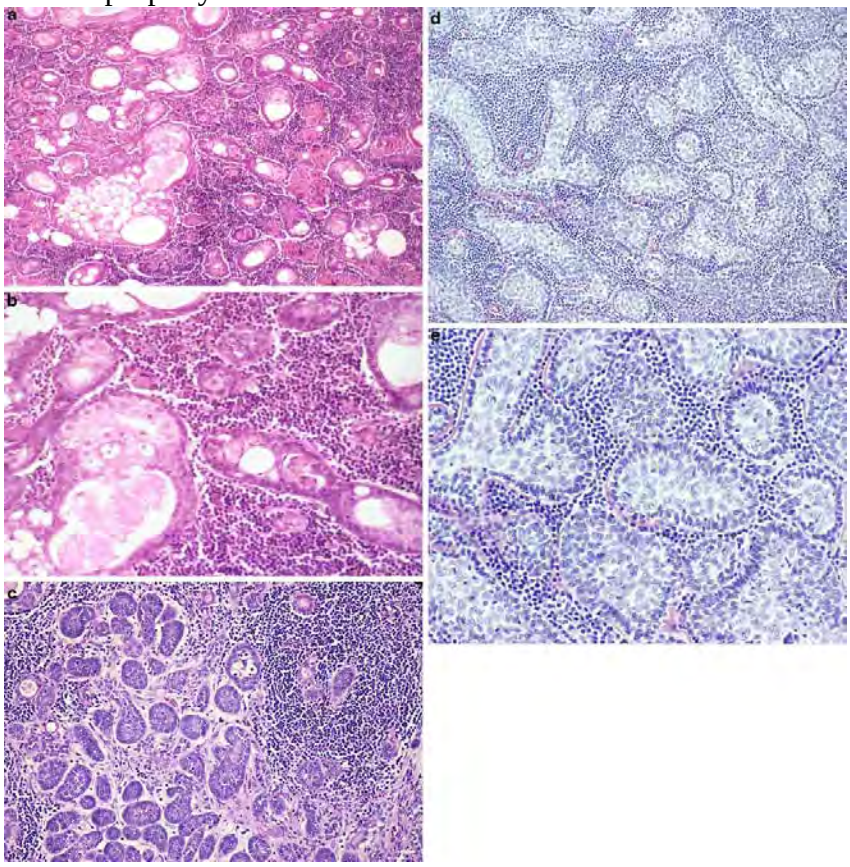
8. Treatment consists of complete surgical excision. These tumors should not recur.

Sebaceous and Non-sebaceous Lymphadenoma

1. Sebaceous lymphadenoma is a rare, benign, well-circumscribed to encapsulated tumor composed of well-differentiated, variably shaped and sized nests of sebaceous glands and ducts within a background of lymphocytes and lymphoid follicles.
2. Cytologic atypia is minimal and there is no tendency to invade local structures.
3. Non-sebaceous lymphadenoma (NSL) is histologically similar, but without sebaceous differentiation. These tumors do not appear to have any association with Epstein Barr virus, papilloma virus, or HHV-8
4. SL: sixth to eighth decade (range,25–89 years) , with no gender preference.
5. present with a mass, which may be slowly enlarging. Approximately 95% of tumors arise in or around the parotid gland.
6. NSL: present with a mass that has been present for up to 5 years. The majority of tumors arose in the parotid gland but they have been reported in the periparotid region, submandibular gland, cervical lymph node, and neck
7. The male:female ratio is approximately equal
8. The mean age: mid-fifties with a range from 11 to 78 years.
9. Sebaceous lymphadenomas have ranged from 1.0 to 6.0 cm in greatest dimension and are usually encapsulated or well-circumscribed,They can be solid, multicystic, or unicystic masses that range from yellow to yellow-white to pink-tan or gray; microcysts are frequent.
10. Sebum or cheesy material is commonly found in many of the cysts.The majority of tumors are composed of variably sized sebaceous glands admixed with salivary ducts in a benign lymphoid background (Fig. 5).
11. Histiocytes and foreign body giant cell inflammatory reactions due to extravasated sebum are commonly found.
12. tumors may contain small areas of identifiable residual lymph node and rarely foci of Warthin tumor may be found (combined SL and Warthin tumor).
13. Non-sebaceous lymphadenomas are similar to SL but without the sebaceous component. These tumors have ranged in size from 0.6 to 8 cm with a mean size of almost 2.5 cm. They are typically well-demarcated and are composed of a

prominent lymphoid population surrounding proliferating epithelium arranged as solid tubules or basaloid islands often with a prominent trabecular arrangement with or without cyst formation.

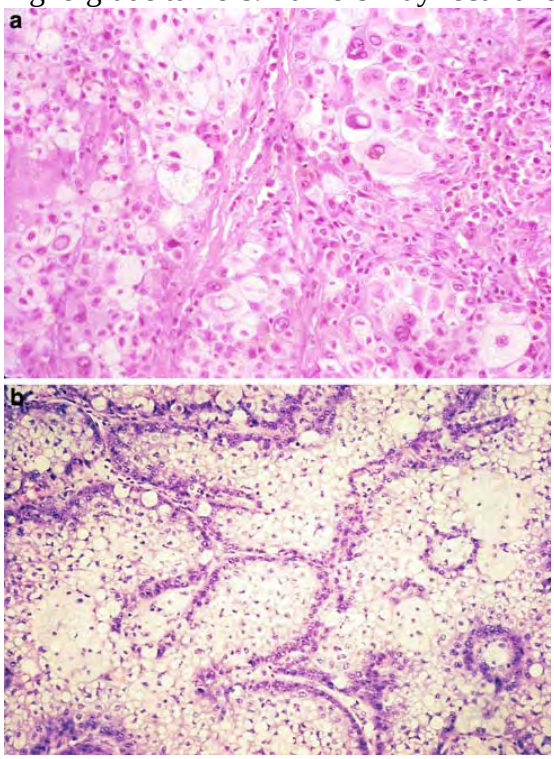
14. Different morphologies: One is similar to a SL (but lacking the sebaceous differentiation) with prominent microcystic change and often with focal squamous differentiation,which is the so-called ‘‘typical type’’ (Fig. 5c)
15. A second group of tumors that is composed of solid nests and interconnecting trabeculae with frequent peripheral palisading, somewhat similar to the cell population of basal cell adenoma, but with a prominent lymphoid component,thus called the ‘‘basaloid type’’.
16. Complete surgical excision is the treatment of choice. These tumors should not recur if properly excised.



a. Sebaceous lymphadenoma is composed of numerous variably-sized and shaped sebaceous glands and small ducts surrounded by a prominent lymphoid stroma with scattered histiocytic aggregates.
b. High-power detail of a. There are several sebaceous glands with holocrine secretion surrounded by a mixed population of lymphocytes. Lymphadenoma, non-sebaceous type.
c. There are nests of basaloid cells surrounded by a mixed benign lymphoid population; several nests have a central space lined by bland squamous epithelium; centrally, there is one nest with several degenerating cells with cytoplasmic clearing, however, definite sebaceous differentiation was not found in this tumor.
d. Sheets of irregular tumor nests composed of basaloid cells with prominent peripheral palisading; surrounding tumor nests is a dense, uniform lymphoid stroma supporting a diagnosis of chronic lymphocytic leukemia.
e Highpowe detail of ‘‘d’’

Sebaceous Carcinoma

1. Malignant tumor composed predominantly of sebaceous cells of varying maturity that are arranged in sheets and/or nests, with varying degrees of cytologic pleomorphism, nuclear atypia, and invasiveness.
2. There is a biphasic age distribution with peak incidence in the third decade and the seventh to eighth decades of life (age range,17–93 years)
3. The male-to-female incidence is approximately 1:1.
4. Patients most frequently present with a painful mass with varying degrees of facial nerve paralysis and occasional fixation to the skin ranged from 0.6 to 9.5 cm in greatest dimension and vary from yellow, tan-white, grayish-white, white, to pale pink. Tumors are frequently well circumscribed or partially encapsulated, with pushing or locally infiltrating margins. Cellular pleomorphism and cytologic atypia are uniformly present and are much more prevalent than in sebaceous adenomas.
5. The treatment of choice is wide surgical excision for low-grade and low-stage carcinomas. Adjunctive radiation therapy is recommended for higher-stage and highergrade tumors. Tumors may recur and rarely will metastasize.

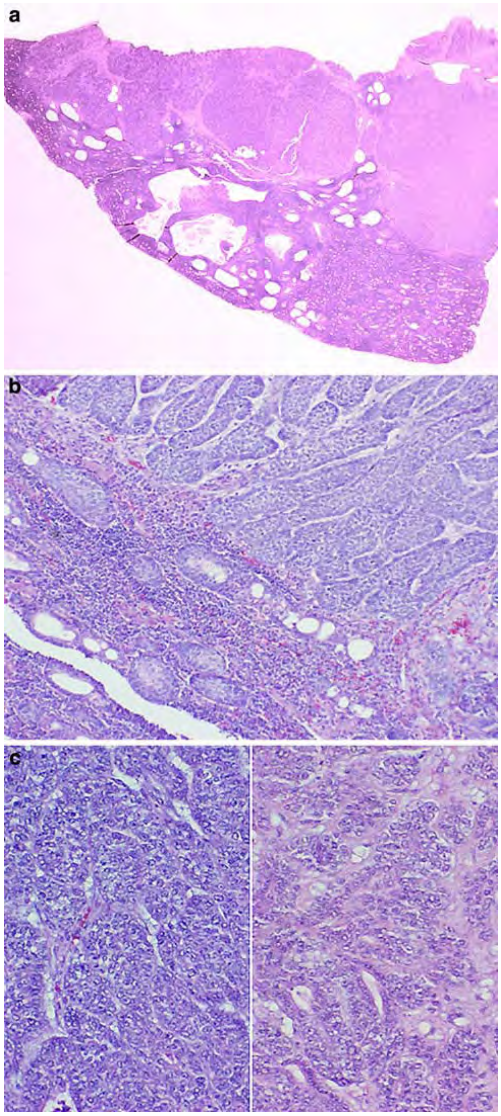


Sebaceous carcinoma composed of sheets of:
a. markedly pleomorphic hyperchromatic sebaceous cells with prominent nucleoli and varying amounts of vacuolated eosinophilic to clear cytoplasm.
b. Pleomorphic hyperchromatic sebaceous cells with prominent nucleoli and varying amounts of finely vacuolated clear cytoplasm

Sebaceous Lymphadenocarcinoma

1. Malignant, rarest
2. Tumors ranged up to 6 cm in greatest dimension with tumor color ranging from tan, yellow-tan to gray, graywhite and white-tan. These carcinomas are focally encapsulated and locally invasive with foci of SL intermixed with or adjacent to regions of pleomorphic carcinoma cells exhibiting varying degrees of invasiveness.
3. The malignant portion has ranged from squamous cell carcinoma, sebaceous carcinoma to sheets of poorly differentiated carcinoma, with areas of ductal differentiation, adenoid cystic carcinoma-like areas, or epithelial-myoepithelial carcinoma-like foci (Fig. 7)
4. Therapy will depend on the type of carcinoma and on clinical staging. Appropriate therapy would typically consist of wide local excision possibly with adjuvant radiation therapy for a high-grade carcinoma component or for advanced stage

tumors.



Sebaceous lymphadenocarcinoma.
a. The sebaceous lymphadenoma component is in the lower left and the carcinoma portion is in the upper right.
b. Detail of the junction of the sebaceous lymphadenoma (lower left) and carcinoma component (upper right).
c. The carcinoma is composed of sheets of poorly-differentiated carcinoma cells (left) with areas of ductal differentiation (right)

Sebaceous Lesions Associated with Other Salivary Gland Neoplasms

1. Warthin's tumor and mixed tumors are the most frequent tumors with sebaceous differentiation, followed in incidence by MEC, epithelial myoepithelial carcinoma, carcinoma ex pleomorphic adenoma, and oncocytoma.
2. Additional examples of sebaceous differentiation have been reported in benign lymphoepithelial lesion [lymphoepithelial sialadenitis (LES)], sialolipoma (lipoadenoma), oncocytic lipoadenoma, basal cell adenocarcinoma, adenoid cystic carcinoma, acinic cell carcinoma, basal cell adenoma, a basal cell adenoma from which arose an adenoid cystic carcinoma and adenocarcinoma, not otherwise specified (NOS).

Differential Diagnosis

1. confused histologically with MEC: luminal holocrine secretions together with vacuolated cytoplasm, foreign body reaction
2. Metastatic renal cell carcinoma: PAX-8(+),cytokeratin 7(-)
3. CD10 stains most renal carcinomas, but it also may be positive in salivary tumors with myoepithelial differentiation.
4. it appears that a positive p63 stain likely eliminates the possibility of a metastasis from a renal primary.
5. two new immunohistochemical markers that recognize proteins associated with

lipid vacuoles: Adipophilin, perilipins : well-characterized in sebaceous skin and eye tumors, with 95–100% of skin and eyelid sebaceous tumors

6. very sensitive markers for sebaceous differentiation and likely can be used to confirm sebaceous differentiation in a salivary gland tumor.
7. The differential diagnosis of NSL consists mainly of lymphoepithelial carcinoma, LES also known as benign lymphoepithelial lesion, and metastatic carcinoma
8. The former can be differentiated from NSL by the lack of invasion, atypia, mitotic activity, desmoplasia, lack of association with Epstein Barr virus, and the presence of ductal differentiation in NSL.
9. The morphology of the lymphoepithelial islands in LES differs from the ductal component in NSL. The epithelial component in NSL, unlike LES, is typically more closely packed, more abundant and contains lumina, while LES is typically not wellcircumscribed and is frequently multifocal
10. Metastatic carcinoma can be differentiated from NSL by the lack of invasion, atypia, mitotic activity and desmoplasia of the latter.

題號	題目
1	Which is the most frequent sebaceous tumor? **(A)** sebaceous carcinoma **(B)** Non-sebaceous Lymphadenoma **(C)** sebaceous Lymphadenoma **(D)** Sebaceous Lymphadenocarcinoma
答案(C)	**出 處 ：** Head and Neck Pathol (2012) 6:101–110 DOI 10.1007/s12105-012-0343-x
題號	**題目**
2	Which is the most aggresive sebaceous tumor? **(A)** Non-sebaceous Lymphadenoma **(B)** sebaceous Lymphadenoma **(C)** Sebaceous Lymphadenocarcinoma **(D)** Sebaceous Adenoma
答案(C)	**出 處 ：** Head and Neck Pathol (2012) 6:101–110 DOI 10.1007/s12105-012-0343-x