

RESIDENT ROUNDS: PART II

Easy Reference Table for Adnexal Neoplasms

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INTRODUCTION

This table reviews some of the most commonly examined adnexal neoplasms. It provides the key distinguishing features of each. It, along with other tables for dermatopathology, have been passed down from previous generations of residents. While we as authors have submitted this table, we cannot take credit for its information as the true authors of this table are unknown.

Table 1.

Adnexal Neoplasms	
Sebaceous	
Sebaceous hyperplasia	Hyperplastic mature sebaceous glands; ectatic infundibulum opening directly to surface
Nevus sebaceous	Increased number, o/w nl, seb glands; relative paucity of hair follicles; may see basal cell hyperplasia
Sebaceous adenoma (Muir-Torre)	Increased layers blue basaloid cells (less than clear, ie >50% sebocytes); sharply circumscribed sebaceous lobules w/ CT septae, orderly maturation
Sebaceoma	Greatly increased layers blue basaloid cells (more than clear, ie <50% sebocytes); more haphazard maturation; still w/ duct form'n
Sebaceous carcinoma	Lobules or sheets of cells separated by fibrovascular stroma; involves subcutaneous tissue, infiltrative, atypia, +/- scant variable sebaceous changes; EMA+, GCDFP-15 -
Eccrine	
Eccrine poroma	Interconnecting basaloid buds off epi with localized duct formation; monotonous; "tassles" hanging off epidermis or "pore"ing down into the dermis; usu acral
Hidroacanthoma simplex	Intraepidermal variant of eccrine poroma; monomorphic cells; PAS+
Eccrine spiradenoma	"Blue balls in the dermis", large lobules; 2 cell types: small with dark nuclei, larger inner with pale nuclei often with central lumen
Syringoma	Multiple small ductal structures, 2 cuboidal cells thick, in fibrous stroma, with "tails" ("sperm in the derm"), in superficial dermis
Mixed tumor of the skin (Chondroid syringoma)	Ductal structures in stroma of mesenchymal and epithelial components with areas of true cartilage; apocrine type – "canals of Venice" around tumor
Microcystic adnexal carcinoma	Syringoma-like, but deeper, atypical; poorly circumscribed; may see more cystic and ductal differentiation
Eccrine mucinous carcinoma	Islands of epithelial tumor cells floating in pools of mucin

Table 1.	
Adnexal Neoplasms	
Apocrine	
Cylindroma	Dermal tumor with discrete islands of basaloid cells, palisading, pink lobules inside; "Jigsaw puzzle"; 2 cell types: large epithelioid and small dark
Hidradenoma	Circumscribed, unencapsulated, lobular with solid and cystic areas; distinct "hidradenoma stroma" – pink, dense, hyalinized – within tumor; less basophilic than cylindroma; highly variable – may have many clear cells or be cystic or solic or in between
Apocrine cystadenoma (hydrocystoma)	Multilocular cyst with luminal ingrowths; 2 layers cuboidal cells; decapitation secretion; folded in upon self
Hidradenoma papilliferum	No connection to epidermis (2/3), no plasmas; maze-like "hide in the maze" (usu vulvar), "lace doily"
Syringocystadenoma papilliferum	Duct-like invaginations from epidermis, plasma cells, papillary proj's into lumen w/ fibrous stalk
Nipple adenoma	Florid papillary lesion with duct-like structures of varying sizes in fibrous stroma
Paget's disease	Mucin-rich pagetoid cells; usually basal, suprabasal; S100, MART-1 -; EMA, CEA, PSA, cytokeratin 7 +
Hamartomas and tumors of germinal cells	
Trichofolliculoma	Central follicle with radiating, immature follicles (daughter follicles); tuft of protruding fine hairs
Trichoadenoma	Between trichofolliculoma & trichoepithelioma; many keratocysts
Trichoepithelioma	Islands of basaloid cells embedded in distinct fibromyxoid cellular stroma; "rail-road tracking", peripheral palisading common; +/- horn cysts, swiss cheese spaces within islands; clefting within stroma rather than around tumor (as BCC); no connection to surface
Desmoplastic trichoepithelioma	Like above, but incr density, hypocellular stroma, increased horn cysts
Trichoblastoma	Large circumscribed basaloid tumor w/ no epidermis; irregular nests of basaloid cells but w/ pilar diff'n; "Leopard skin" (monotonous blue cells) w/ irreg, filiform islands of pinker cells
Cutaneous lymphadenoma	Type of trichoblastoma with some peripheral palisading in fibrous stroma; intense infiltrate with lymphs, histios, plasmas
Basaloid follicular hamartoma	Like BCC, but no retraction artifact, no mitoses or atypia; BCL-2 -
Infundibular tumors	
Tumor of follicular infundibulum	Anastomosing islands of basophilic cells with multiple points of attachment to overlying epithelium; peripheral palisading; like BCC but with central pale or eosinophilic cells, small follicular bulbs, and papillary mesenchymal bodies or ductal structures
Dilated pore of Winer	Dilated follicular pore lines by acanthotic epithelium, irregular budding of epidermis into surrounding dermis
Pilar sheath acanthoma	Invagination arising from epidermis; lobulated stratified squamous epithelium without granular layer; +/- vacuolated cells, peripheral palisading
Trichilemmal (external sheath) tumors	
Trichilemmoma (Cowden's)	Central follicle surrounded by several layers squamous clear cells, palisaded layer of columnar basal cells; circumscribed, exophytic, lobular; focal keratinization; uniform small cells w/ vesicular nuclei; glassy hyaline mantle surrounds lobules
Matrical tumors	
Pilomatricoma	2 cell types: Basaloid cells w/ mitoses & shadow/ ghost cells; calcification in 2/3
Perifollicular mesenchymal tumors	
Trichodiscoma (Birt-Hogg-Dube)	Fascicles of loose, fibrillar connective tissue, mucinous ground substance, w/ hair follicle at edge
Fibrofolliculoma	Central hair follicle with dilated keratin-filled infundibulum, surrounded by loose connective tissue w/ increased mucin; epithelial strands extend out from upper follicle