Skin Adnexal Tumors-An Overview

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A Bump!

- Nonspecific clinical appearance
  - Usually minimal skin changes
- Head and neck, trunk
Site Specific Tumors

- **Extremities**
  - Papillary digital adenocarcinoma
  - Papillary eccrine adenoma

- **Axillae**
  - Apocrine carcinoma

- **Vulva and Perineum**
  - Hidradenoma papilliferum
  - Extramammary Paget’s disease
  - Ductopapillary apocrine carcinoma
Clues to Underlying Disease

- Genodermatosis
  - Turban Tumor
  - Ancell-Spiegler syndrome
  - Cowden’s syndrome
  - Muir-Torre syndrome
- Clear cell syringoma
Potential Multiplicity

- Cylindroma (Turban tumor syndrome)
- Syringoma
- Poroma
- Trichoepithelioma
- Trichilemmoma (Cowden’s syndrome)
- Sebaceous tumors (Muir-Torre syndrome)
Childhood Tumors

- Syringoma
- Syringocystadenoma papilliferum
- Poroma
- Cylindroma
- Pilomatrixoma
- Trichoepipithelioma
Histopathologic Categories

- Eccrine
- Follicular
- Sebaceous
- Apocrine
- Mixed
Sweat Gland Neoplasms (Eccrine)

- Cylindroma
- Spiradenoma
- Acrospiroma
- Syringoma
- Hidrocystoma
- Poroma
- Mixed tumor
- Papillary eccrine adenoma
- Syringofibroadenoma
Clues to Eccrine Tumors

- Ductal or tubular differentiation
  - Tubules not lined by corneocytes in crenulated pattern (sebaceous ducts)
  - Not lined by cells with decapitation secretion
# Follicular Neoplasms

<table>
<thead>
<tr>
<th>Location</th>
<th>Benign</th>
<th>Malignant</th>
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</thead>
<tbody>
<tr>
<td>Outer Hair sheath</td>
<td>Tumor of the follicular infundibulum</td>
<td>Trichilemmal carcinoma</td>
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<tr>
<td></td>
<td>Pilar sheath acanthoma</td>
<td>Malignant proliferating pilar tumor</td>
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<td></td>
<td>Winer’s pore</td>
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<td>Trichoadenoma</td>
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<td></td>
<td>Trichilemmoma</td>
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<tr>
<td></td>
<td>Proliferating pilar tumor</td>
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<tr>
<td>Germanitive epithelium</td>
<td>Trichofolliculoma</td>
<td>Trichofollicular carcinoma</td>
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<td></td>
<td>Trichoepithelioma</td>
<td>Trichoepithelial carcinoma</td>
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<td></td>
<td>Desmoplastic trichoepithelioma</td>
<td>Pilomatrix carcinoma</td>
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<tr>
<td></td>
<td>Pilomatrixoma</td>
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<tr>
<td>Mixed epithelium and mesenchyme</td>
<td>Basaloid follicular hamartoma</td>
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<tr>
<td></td>
<td>Trichoblastoma</td>
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<tr>
<td>Pilar mesenchyme</td>
<td>Trichodiscoma</td>
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<tr>
<td></td>
<td>Perifollicular fibroma</td>
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<td></td>
<td>Fibrofolliculoma</td>
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<td>Follicular myxoma</td>
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<td>Leiomyoma</td>
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Clues to Follicular Neoplasms

- Recapitulate Hair Follicles
  - Follicular bulb and papilla
  - Matrical cells
  - Shadow cells
  - Trichohyalin granules
Sebaceous Neoplasms

- Hyperplasias
  - Senile
  - Premature
  - Nevus sebaceus of Jadassohn
- Benign
  - Sebaceous adenoma
  - Basosebaceous epithelioma
  - Superficial epithelioma with sebaceous differentiation
  - Sebaceoma
- Malignant
  - Ocular sebaceous carcinoma
  - Extraocular
  - Carcinoma with mixed adnexal differentiation
Clues to Sebaceous Neoplasms

- Sebocytes or tubule resembling sebaceous duct
- Holocrine secretion
Apocrine Neoplasms

- Hidrocystoma
- Tubular adenoma
- Syringocystadenoma papilliferum
- Hidradenoma papilliferum
- Extramammary Paget’s disease
Clues to Apocrine Neoplasms

- Ductal changes with apocrine snouting (decapitation secretion)
Mixed Neoplasms

- Microcystic adnexal carcinoma
- Lymphoepithelioma-like carcinoma of the skin
- Malignant mixed tumors
# Histologic Clues for Benign vs. Malignant

<table>
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<tr>
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<tbody>
<tr>
<td>Vertically oriented</td>
<td>Horizontally oriented</td>
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<tr>
<td>Borders smooth</td>
<td>Borders infiltrative</td>
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<tr>
<td>Cytologically bland</td>
<td>Cytologically atypical</td>
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<tr>
<td>Mitotic figures usually scarce</td>
<td>Mitotic figures usually abundant</td>
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<tr>
<td>Lymphovascular invasion absent</td>
<td>Lymphovascular invasion may be present</td>
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Treatment for Carcinomas

- Wide excision
- Physical examination to rule out lymph node metastasis
- Sentinel lymph node?
  - Digital Papillary Adenocarcinoma
  - Eccrine carcinomas
Prognosis

- Skin to skin metastases
  - Porocarcinomas
  - Sebaceous carcinoma
- Regional Lymph node metastasis
- Lung, liver, bone metastasis