Objectives

• Develop a Diagnostic Approach

• Review Differential Diagnosis

• Case-Based Review
History – Important Points

• Mass itself:
  – Duration, ? Size or character change since noticed

• Associated symptoms:
  – Pain, sensory loss, epistaxis, dysphagia, hoarseness, hemoptysis, cold/heat intolerance, hearing change…

• Social history:
  – Smoking, chewing tobacco, alcohol

• Past medical history
  – Radiation*, skin cancer/lesion

• Family history *
Physical Examination

• Take the time to be thorough
• Inspection:
  – Exterior scalp, face, ear
  – oropharynx, hypopharynx, larynx, nasal passage
  – External Ear
  – Flexible fiberoptic endoscopy
• Palpation -- External & Bimanual
  – Mass, thyroid, lymph node levels, oropharynx, salivary glands
• Relation to swallowing/tongue protrusion
Fine Needle Aspiration

- Often the first diagnostic test
- Simple and highly sensitive
- No longer felt to risk spread of tumor
- Technically demanding sometimes *
- Don’t forget US guidance can be helpful
- Cytopathologist is key
Lab Tests & Imaging

- Play a smaller role than usual
- Blood work??
- C.T. scanning
  - Large/complicated mass
  - ? Remote primary
Differential Diagnosis Simplified

- Congenital Lesions *
- Salivary Gland Lesions *
- Thyroid Gland Lesions *
- Lymph Nodes *
Triangles of the Neck

Anterior
Submandibular
Submental
Carotid

Posterior

Anterior Triangle

Posterior Triangle
Triangles of the Neck

- **Anterior**
  - Submandibular
    - Submandibular gland
  - Submental
    - Dermoid, ranula
  - Carotid
    - Branchial cleft cyst, Carotid Body Tumour

- **Posterior**
  - Lipoma, Neurogenic tumor

- * Lymph node lesions can be anywhere *
Lymph Nodes

- Inflammatory
- Lymphoma
- Metastatic
  - Site of the node can help localize the primary
  - Supraclavicular nodes can be non head & neck
  1. Breast & Lung most common
  2. GI tract, Prostate, Testicular
  3. Eponym*
Lymph Node Levels
Memorial Sloan-Kettering
<table>
<thead>
<tr>
<th>Lymph Node Site</th>
<th>Lymph Node Level</th>
<th>Primary Cancer Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submental, submandibular</td>
<td>Level I</td>
<td>Lip, oral cavity, skin, salivary gland</td>
</tr>
<tr>
<td>Upper jugular nodes</td>
<td>Level II</td>
<td>Oral cavity, oropharynx, nasopharynx, hypopharynx, larynx, salivary gland</td>
</tr>
<tr>
<td>Mid-jugular nodes</td>
<td>Level III</td>
<td>Oral cavity, oropharynx, hypopharynx, larynx, thyroid</td>
</tr>
<tr>
<td>Lower jugular nodes</td>
<td>Level IV</td>
<td>Oropharynx, hypopharynx, larynx, cervical esophagus, thyroid</td>
</tr>
<tr>
<td>Accessory nerve nodes</td>
<td>Level V</td>
<td>Nasopharynx, scalp</td>
</tr>
<tr>
<td>Supraclavicular nodes</td>
<td>Level V</td>
<td>Breast, lung, gastrointestinal tract</td>
</tr>
<tr>
<td>Suboccipital nodes</td>
<td>Level V</td>
<td>Skin</td>
</tr>
<tr>
<td>Parotid nodes</td>
<td>Level V</td>
<td>Skin, parotid gland</td>
</tr>
</tbody>
</table>
Cases
7 Year Old Boy

- Small lump middle of neck
- Asymptomatic
- Otherwise healthy
- Physical
  - 1.5cm, firm lump middle neck
  - Moves up with tongue protrusion
- What now?
  - ? FNA  ? Eponym
65 Year Old Man

- Asymptomatic 2 cm lump Right submandibular triangle
- Chews tobacco, no EtOH
- Remainder history negative
- Physical
  - 2 cm firm lump ? Submandibular gland on Bimanual
  - Remainder negative
- FNA – Mucoepidermoid Ca
- What now?
38 year old Woman

- Asymptomatic
- Referred by GP for neck nodes
- History entirely negative
- Physical
  - Multiple nodes levels 3 & 4 Right side
  - Small nodule Right Thyroid
- Likely Diagnosis?
- FNA – Papillary Ca
- What now?
56 Year Old Man

- Asymptomatic Lump Left Neck
- Heavy Smoker, occasional EtOH
- No past history or family history
- Physical Exam
  - Hard lump L neck anterior triangle
  - Otherwise negative despite being thorough
- FNA – Squamous Cell Carcinoma
- What Now?
Questions/Comments