Head and Neck Pathology Grossing Guidelines

Do not cut any HN specimens unless you are fully oriented anatomically

- Orient by anatomic structures (oral tongue, junction of buccal/gingival mucosa, alveolar ridge, angle of jaw, hard palate, etc)
- For mandibulectomies/maxillectomies, please ask for help if unsure
- Ink resection margins
- Describe all abnormalities: size (staging cutoffs: 2 cm, 4 cm), location, extent, depth (staging cutoffs: 0.5 cm, 1 cm), distance to margins
- Sample all margins (if grossly close, e.g. 1 cm, submit perpendicular section; otherwise submit a shave of the margin closest to tumor)
- Sample tumor:
  - Show relationship to peripheral/deep margins
  - Show maximum depth of invasion
- Specimens containing mandible or maxilla:
  - Bone margins
  - Sections of bone adjacent to tumor or gross involvement of bone
- Diagrams and gross photos are appreciated

**Specimen Type:** THYROIDECTOMY (hemi/total)

**Procedure:**
- Weigh (fresh), orient, and measure
- Examine for defects on surface
  - Comment on presence/absence of skeletal muscle
- Ink: anterior blue, posterior black, orange isthmic margin
- Check clinical record for location of suspected lesions (imaging/FNA)
  - Draw diagram with locations and sizes
- Serially section from superior to inferior (keeping order in case you need to return to case and nodule/region)
- Identify other structures (lymph nodes, pyramidal lobe etc)
- Describe cut surfaces
  - Size (staging size cutoffs: 1 cm, 2 cm, 4 cm)
  - Number, location, characteristics (color, consistency, hemorrhage, necrosis, fibrosis, calcs) of nodules
  - Encapsulation of nodules
  - Distance to margins
  - Remaining parenchyma
  - Indicate in which cassettes the nodules are located
Gross Template:
Labeled with the patient’s name (last name, first name), medical record number (#), designated “***”, and received [fresh/in formalin] is *** gram [intact/disrupted] [hemi/total] thyroidectomy. [Describe orientation if provided]. The thyroid measures *** x *** x *** cm. The capsule is [intact, ruptured, smooth] [with/without] adherent skeletal muscle. The specimen is serially sectioned into [#] of levels to reveal [describe any lesions present including size, color, external appearance, relationship to capsule, calcification, necrosis, relationship to uninvolved thyroid, and isthmus resection margin]. Nodule #1 is *** x *** x *** cm (encapsulated/well-circumscribed/ill defined) and measures *** cm to the anterior resection surface, *** cm to the posterior resection surface, *** cm to the isthmus resection surface, and *** to Nodule #2…

The remaining cut surface is [red-brown, smooth, unremarkable]. Representative sections are submitted [describe cassette submission].

Cassette Submission: 4-7 cassettes
• Single/dominant encapsulated nodule:
  o Submit entire capsule of nodule and include nearest inked margins
  o If nodule is very large, can refrain from submitting center of lesion
  o Submit representative uninvolved thyroid tissue
• Single/dominant unencapsulated nodule (often papillary ca):
  o If small, submit entire lesion
  o If >2 cm, can submit representative 1/cm; lesion to margin
  o Submit representative uninvolved thyroid tissue
  o For medullary carcinoma, in addition to lesion, submit middle 1/3 of both lobes
• Multinodular goiter:
  o 1 cassette per 1 cm of the greatest dimension of the thyroid
  o Focus on suspicious areas (solid, sclerotic, hemorrhagic)
• Multiple small unencapsulated nodules:
  o Submit representative sections of each nodule and note distances to one another and to margins
  o Focus on larger and grossly suspicious nodules
• Unremarkable gland/homogenous, diffusely enlarged: (including Graves and Hashimoto)
  o 3 blocks per lobe (upper, mid, lower) and isthmus (7 for total thyroid)