**Purpose**

Thyroidectomies are usually performed for the removal of benign nodules, Grave’s disease, thyroiditis and cancer. They are submitted as a hemi or complete thyroidectomy.

To orient the thyroid, the posterior aspect is concave. Check for possible parathyroid glands on the posterior aspect. The right and left lobes taper superiorly with the isthmus being inferior. A pyramidal lobe is rarely present, extending superior from the isthmus.

**Procedure**

* Weigh the specimen. Measure each lobe of the thyroid and the isthmus.
* Examine the capsule for tears and possible parathyroid glands.
* Ink each lobe and the isthmus a different color for a complete thyroidectomy.
* Serially section each lobe 2-3mm from superior to inferior, keeping orientation of the lobe.
* Describe any nodules, cysts or scars- color, border well-defined, encapsulated, solitary or multiple nodules, gelatinous or granular cut surface, friable or firm. State the measurement of the nodule or nodules, location within the lobe and if involvement of the capsule or the isthmus is noted. If there are numerous nodules that look similar, this can be stated but if nodules appear different or are encapsulated, mention these separately.
* Describe the non-nodular thyroid parenchyma- red and granular or a pale pink and lobular.
* If there is adipose attached to the isthmus, section through for possible lymph nodes or parathyroid glands.

***Sections for Histology***

Submit sections from superior to inferior for each lobe present:

* For thyroids excised for Graves’ Disease, Thyroiditis or Goiter that do not have atypical nodules- submit three sections for each lobe and one of the isthmus.
* For thyroids containing nodule or tumor, 1 section for each 0.5 cm of tumor, showing tumor-thyroid interface. **Follicular tumors must have the entire capsule submitted**. If C-celled hyperplasia is suspected (MEN 2a and 2b), submit the entire lobes.
* Submit any lymph nodes or parathyroid glands if present.

***Sample Dictation***

 Labeled “Thyroid”, received in formalin in a small container is a 12gm thyroidectomy, with the right lobe 3.5x 2.2x 1.2cm and the left lobe 4.2x 2.3 x 1.5 cm. A stitch designates the right upper pole.

 Sectioning reveals a 2.3x 1.1x 0.9 cm granular, ill-defined, grey-white firm tumor that abuts the capsule in the left upper pole.

 The remaining parenchyma is unremarkable.

 Ink code: Right Lobe- blue

 Left Lobe- green

 Isthmus- yellow

Cassette Summary:

A1- 3: LEFT SUPERIOR LOBE WITH TUMOR. SS

A4: LEFT MID LOBE. SS

A5: LEFT INFERIOR LOBE. SS

A6-8: RIGHT LOBE FROM SUPERIOR TO INFERIOR. SS

A9: ISTHMUS. SS