Multidisciplinary Pediatric Endocrine Surgery (MPES) Clinic Patients

Thyroid Nodule Work-up

Pre-op evaluation

- Labs
  - TSH, Free T4, TPO antibodies
  - If TSH is low -> RAI scan
    - If nodule is "hot" -> lobectomy
- US
  - Cystic – F/U with PCP or Endocrinologist
  - Solid ≥ 1 cm diameter -> FNA
    - < 1 cm diameter -> F/U US in 6 months
    - < 1 cm diameter with suspicious features -> FNA
      - Suspicious features include: microcalcifications, increased vascularity, taller than wide, irregular borders, extra thyroidal extension
      - Other: family history of thyroid cancer (first degree relative), history of radiation to the neck, Syndrome with increased risk of thyroid cancer (PTEN, DICER1 syndrome, Carney Complex, APC associated polyposis, etc.)
- FNA
  - Performed by interventional radiology with ultrasound guidance and sedation as needed with pathologist present to ensure adequate tissue

Bathesda Classificaiton -> Action

I	Non-diagnostic	Re-do FNA after 3 months
II	Benign	F/U US in 6 months
III	AUS/FLUS*	Thyroid lobectomy
IV	Follicular Neoplasm	Thyroid lobectomy
V	Suspicious for Malignancy	Thyroid lobectomy with frozen section possible total thyroidectomy with central lymph node dissection
VI	Papillary Thyroid Cancer	Total thyroidectomy with central neck lymph node dissection

*Atypia of undetermined significance, Follicular lesion of undetermined significance

Operating Room

- Recurrent laryngeal nerve monitoring
  - ETT size < 6.0 use stick-on electrodes
- Parathyroid management
  - Confirm identity with small frozen section if necessary
  - Devascularized glands minced up and implanted in ipsilateral sternocleidomastoid muscle, or forearm
  - Near infrared camera if available