GOALS AND OBJECTIVES

Thyroid Clinic

Center for Advanced Medicine, 5th floor, Suite C
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ROTATION GOALS AND EDUCATIONAL PURPOSE

The educational goals for fellows in endocrinology, diabetes and metabolism include the following:
1. Provide the highest standard of patient care for thyroid disorders.
2. Become competent in the clinical, ultrasound, and biopsy evaluation of thyroid masses, thyroid nodules, and thyroid cancer.

ROTATION SCHEDULE AND LOGISTICS

The Thyroid Clinic rotation is comprised of two separate clinics, both of which meet in the Center for Advance Medicine, 5th floor, Suite C. Both first- and second-year fellows attend the Thyroid Nodule Clinic one half day per week, every other Monday morning for 2 months with Dr. Riek. Second-year fellows also attend the Thyroid Cancer Clinic one half day per week, every other Wednesday for 3 months with Dr. Baranski. Additional thyroid clinics with Dr. Herrick are available if additional procedures are needed or desired for further experience. Patients referred for consultation and those receiving ongoing care are included. Finally, when fellows determine that their own clinic patient requires a thyroid ultrasound or biopsy, they are encouraged to consult with one of the thyroid attendings to confirm the need for procedure and arrange a time to perform the procedure themselves under supervision to provide continuity of care while gaining further experience.

ADDITIONAL RESOURCES

Instruction begins with a lecture and practical ultrasound and biopsy session over 3 hours. After this tutorial, fellows are encouraged to read about, watch, and finally perform thyroid ultrasound and biopsies on a mannequin under direct supervision and assistance from Drs. Riek, Baranski, or Herrick. The ultrasound is frequently available outside of thyroid clinic times and can be utilized for additional practice on co-fellows or other staff. For biopsy practice, the mannequin is available anytime. Alternatively, homemade gelatin molds with submerged olives, onions, etc. are a reasonable mimic of the human neck and thyroid nodules for practice biopsies. The fellows are encouraged to review slides of their biopsy cases with pathology and strongly encouraged to attend the Endocrine Oncology Conference on the 1st and 3rd Thursday of the month at 4:30 pm in the Northwest Tower, Suite 1160. Fellows are encouraged to read background material either in textbooks or online. For specific questions, current literature is often the most up to date. In particular, fellows should familiarize themselves with the 2015 American Thyroid Association guidelines for the management of thyroid nodules and differentiated thyroid cancer (http://online.liebertpub.com/doi/full/10.1089/thy.2015.0020).
Haugen, BR, et al. 2015 American Thyroid Association Management Guidelines for Adult Patients with Thyroid Nodules and Differentiated Thyroid Cancer: The American Thyroid Association Guidelines Task Force on Thyroid Nodules and Differentiated Thyroid Cancer. Thyroid. 2016:26(1):1-133.

**ROTATION COMPETENCY OBJECTIVES/CURRICULUM**

Areas of special focus for competency milestones are described below. First-year fellows should be able to develop basic competency in the skills listed. Second-year fellows should be almost independent in these skills and be able to handle more complex patients and management decisions, as well as more technically difficult procedures.

1. **Patient care**
   a. Perform a thorough but focused history and physical examination with special attention to factors related to thyroid disease and thyroid cancer
   b. Appropriately select patients for neck ultrasonography and/or fine needle aspiration biopsy of thyroid nodules
   c. Successfully perform and document a full diagnostic thyroid ultrasound
      i. All ultrasounds will be directly supervised by Drs. Riek, Baranski, or Herrick
      ii. At least 10 ultrasounds are required for completion of the fellowship
      iii. Fellows are expected to record cases in which they performed the ultrasound
   d. Successfully perform and document fine needle aspiration biopsy of thyroid nodules with either the parallel or perpendicular approach
      i. All biopsies will be directly supervised by Drs. Riek, Baranski, or Herrick
      ii. At least 10 fine needle aspiration biopsies are required for completion of the fellowship
      iii. Fellows are expected to record cases in which they performed at least one pass of the biopsy, with a note of whether the biopsy was successful
   e. Integrate history, physical exam, laboratory, imaging, and biopsy results to arrive at the proper diagnosis and formulate an appropriate management plan
   f. Provide appropriate follow-up care for post-operative management and surveillance of patients with thyroid nodules and/or thyroid cancer

2. **Medical Knowledge**
   a. Demonstrate a full fund of knowledge in the range of problems encountered with the thyroid gland, including but not limited to:
      i. Multinodular goiter
      ii. Solitary nodules
      iii. Thyroid cancer
      iv. Hashimoto’s thyroiditis
      v. Graves’ disease
   b. Understand the basic anatomy of the neck and indications for thyroid sonography
   c. Know how to document findings from thyroid sonography
   d. Identify high and low-risk features of thyroid nodules and the associated indications for fine needle aspiration
   e. Know and understand the implications of the Bethesda System for reporting thyroid cytopathology
   f. Identify the utility and indications for consideration of molecular testing as part of fine needle aspiration
g. Identify the indications for partial or total thyroidectomy
h. Understand the post-operative management of thyroid cancer, specifically with respect to the use of radioactive iodine therapy
i. Understand the role of ultrasound, whole body scan, other imaging, and thyroglobulin levels in the surveillance of patients with thyroid cancer

3. Practice-based learning and improvement
   a. All fellows should understand their limitations of knowledge and judgment, seek assistance when needed, and be self-motivated to acquire knowledge
   b. Monitor practice with a goal for improvement
   c. Use knowledge of study design and statistical methods in the critical appraisal of clinical studies and apply to the care of patients
   d. Use information technology to manage information and access medical information
   e. Accept real-time feedback, learn from errors, and develop self-improvement plans

4. Interpersonal and communication skills
   a. Communicate effectively with patients and caregivers
      i. Demonstrate caring and respectful behaviors with patients, families, and other caregivers
      ii. Particular attention should be paid to the need for thoughtful conversation relative to the thyroid ultrasound procedure and biopsy in order for the patient to be put at ease
      iii. Be aware of draping and positioning to optimize patient comfort as much as possible
      iv. Special attention should also be paid to the communication of a biopsy finding of malignancy, with sensitivity to the impact that the disease might have on the patient and family
   b. Communicate effectively with the medical team
   c. Facilitate the learning of students or other health care professionals
   d. Complete health records accurately, concisely, appropriately, and in a timely manner
   e. All clinic and procedure notes will be reviewed, edited as necessary, and cosigned by the supervising physician
   f. Follow-up with referring physicians in a timely manner to convey diagnostic test results and management plans

5. Professionalism
   a. Demonstrate respect, compassion, and integrity
   b. Demonstrate a commitment to excellence and on-going professional development
   c. Have professional and respectful interactions with patients, caregivers, and members of the interprofessional team
   d. Follow through on patient care with timely and effective communication with colleagues and referring physicians
   e. Demonstrate an appreciation for the ethical, cultural and socioeconomic dimensions of illness, demonstrating sensitivity and responsiveness to patients’ culture, age, gender, and disabilities
   f. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and other aspects of clinical care
6. **System-based practice**
   a. Work effectively with an interprofessional team (e.g. medical assistants, nurses, cytotechnologists, cytopathologists)
   b. Advocate for quality patient care and assist patients in dealing with system complexities (e.g. obtaining outside imaging or slides)
   c. Recognize system error and advocate for system improvement
   d. Identify forces that impact the cost of health care and advocate for and practice cost-effective care (e.g. avoiding unnecessary or repeat labs, imaging, or procedures)
   e. Transition patients effectively within and across the health delivery systems