

ENDOCRINOLOGY CURRICULUM

TARGET: PGY 1-3
Updated: February 2011

A. EDUCATIONAL GOALS AND OVERVIEW

The overall goal of this curriculum is for residents to become competent in diagnosing and managing outpatients with common endocrine disorders, to be able to diagnose and manage patients in the hospital with more severe or acute presentations of disease, and to be able to refer appropriately. Residents will gain considerable experience in the management of diabetes mellitus and its complications, the recognition and treatment of endocrine emergencies, the appropriate use and interpretation of endocrine laboratory studies, and in the diagnosis and management of a wide variety of endocrine diseases.

B. CURRICULUM DESCRIPTION AND STRUCTURE

At OVMC, residents will attend the Endocrinology clinics on Friday afternoons during the Ambulatory Medicine rotation. Residents will manage patients with more severe or acute endocrine diseases during rotations on the Medicine Wards, ICU and ER. Supervision of the Endocrinology clinics will be provided by an Endocrinology full-time attending, as well as part-time and volunteer attendings. Supervision during the inpatient and ER rotations will be provided by Medicine or ER attending faculty, as appropriate, with input from the Endocrinology consultant.

C. OBJECTIVES (By RRC competency and PGY level)

At the completion of the 3-year training program, the resident will be able to:

1. Medical Knowledge

Note: The Medical Knowledge objectives of this curriculum are comprehensive. It is understood that residents will focus their study on the medical conditions of the patients they are exposed to during their rotations. Residents should also enhance their medical knowledge in the other areas listed below. Exposure to additional patients and conditions, supplemented by individual study, should take place on a variety of rotations throughout the residency. Competency with all of the Medical Knowledge objectives is not expected until the end of the 3-year training program.

- Demonstrate a working knowledge (including indications, limitations and appropriate utilization) of studies of (*PGY 1 – basic knowledge; PGY 2/3 – advancing knowledge*):
 - Thyroid function
 - Pituitary function
 - Gonadal function
 - Adrenal function
 - Diabetes function

- Demonstrate an appropriate knowledge of the basic and clinical sciences, understand complex relationships and mechanisms of disease, and recommend appropriate diagnostic and treatment options for the following medical conditions (*PGY 1 – basic knowledge; PGY 2/3 – advancing knowledge; by the end of the 3rd year, a resident should be able to independently implement an effective diagnostic and treatment plan or know how and when to appropriately refer*):
 - Diabetes Mellitus: Type 1 and 2
 - Diagnosis and Evaluation
 - Treatment
 - DKA and hyperosmotic states

- Complications of DM
- DM and CAD
- Hypoglycemia
- Pituitary Disorders
- Pituitary Tumor
 - Prolactinoma
 - Non-functioning tumors
 - Empty Sella Syndrome
 - Diabetes Insipidus
 - SIADH
- Hypopituitarism
 - Pituitary Apoplexy
 - Sheehan Syndrome
- Growth Hormone
 - General
 - Acromegaly
- Adrenal Disorders
 - Diabetes Insipidus
 - SIADH
 - Adrenal Tumors
 - Pheochromocytoma
 - Incidentaloma
 - Cushing's Syndrome
 - Adrenal Insufficiency
 - Congenital Adrenal Hyperplasia
- Thyroid Disorders
 - Evaluation of Thyroid Function Tests
 - Hyperthyroidism
 - Graves Disease
 - Thyroiditis
 - Hypothyroidism
 - Euthyroid Sick Syndrome
 - Thyroid Nodules and Cancer
 - Evaluation of Nodules
 - Thyroid Cancer
 - Goiter
- Calcium Disorders
 - Hypercalcemia
 - Hyperparathyroidism
 - Hypercalcemia of Malignancy
 - Hypocalcemia
 - Bone Disease
 - Osteoporosis
 - Paget's Disease
- Disorders of Reproductive Hormones
 - Infertility
 - Amenorrhea (including Polycystic Ovary Syndrome)
 - Hirsutism
 - Erectile Dysfunction
 - Testosterone Replacement

- Disorders of Puberty
 - Turner's
 - Klinefelter's

2. Patient Care

- a. Complete an interview, physical exam (especially of the thyroid, the diabetic eye, diabetic foot, genitalia, breast, skin, and hair) and patient data review which is accurate, effective and appropriate for the patient (PGY 1-3)
- Create assessments & plans and make therapeutic decisions based on appropriate data (PGY 1 – basic skills, with assistance; PGY 2/3 – advancing skills, towards independence as appropriate)
- Demonstrate sound judgment, insight and prioritization skills to make reasonable, "good sense" clinical choices (PGY 1-3)
- Safely and proficiently perform medical procedures that minimizes patients' discomfort and maintains sterile precautions (PGY 1-3)

3. Interpersonal and Communication Skills

- Communicate effectively with the principle provider(s) caring for the patient, verbally and in writing (in the medical record or consult note) (PGY 1-3)
- Communicate effectively with the patients and their families regarding education and counseling (PGY 1-3)

4. Professionalism

- Demonstrate respect, compassion, integrity and honesty (PGY 1-3)
- Role model responsible and ethical behavior, including acknowledgement of errors (PGY 1-3)
- Consider the needs of the primary consulting team, patients, families, colleagues and hospital/clinic staff, including being sensitive to different cultural/socioeconomic backgrounds, and avoiding judgmental behaviors (PGY 1-3)

5. Practice-Based Learning and Improvement

- Demonstrate a commitment to self-assessment and improvement by listening to and incorporating feedback (PGY 1-3)
- Effectively use information technology (e.g., computer resources) and an EBM approach to providing medical care (PGY 1-3)
- Research and discusses relevant literature with the team or consulting service (PGY 1-3)

6. Systems-Based Practice

- Effectively access hospital/clinic resources; appropriately coordinate inpatient care with subsequent outpatient f/u care (PGY 1-3)
- Delineate clear relationships between the consult service and the primary team (PGY 1-3)
- Complete charting requirements (date/time/sign all notes, write legibly, no unapproved abbreviations) (PGY 1-3)

D. TEACHING METHODS

- Attendings will be responsible for teaching housestaff during residency training. An Endocrinology attending will be responsible for teaching during Endocrinology clinic, as well as teaching during Endocrinology consults to inpatient services and the ER/Urgent Care areas. Medicine attendings will be responsible for teaching during ward and ICU rotations.
- Learning is patient based, and housestaff are expected to supplement their learning with additional reading on the diseases encountered and those listed above.
- Housestaff will participate in regularly scheduled clinics, as described in (B) above.
- The Endocrinology attending will provide a monthly noon lecture series on important Endocrinology topics.

E. EDUCATIONAL RESOURCES

- Up-To-Date
- Harrison's Textbook of Medicine
- On-line EBM resources are available in the Library and the housestaff lounge.

F. PROGRESS & MONITORING

- Attending physicians (Endocrinology and Medicine attendings) will give verbal feedback on the resident's performance throughout the training program.
- The attendings on the different rotations will submit a written evaluation on the above objectives and competencies at the end of the rotations.
- A supervising physician will complete a computerized evaluation form after each procedure performed, to document satisfactory competency.
- Yearly in-service examinations will evaluate medical knowledge.