

CURRICULUM: ENDOCRINOLOGY, DIABETES AND METABOLISM

Overview

Endocrinology disorders are very common, yet present with generalized, diverse and non-specific symptoms. Often the same disorder can present differently from individual to individual. The general internist needs to recognize these disorders and separate them from other medical and psychiatric conditions. Endocrinology teaching stresses recognition of the sign and symptoms of endocrine disorders by taking a careful history, performing a physical exam and reviewing lab information. A differential diagnosis is formulated and appropriate diagnostic tests are ordered to arrive at a diagnosis and treatment plan. Follow-up and patient education is stressed. The elective endocrine subspecialty rotation is designed to provide a broad based clinical approach to recognition, diagnosis, and treatment of hormone disorders and their metabolic consequences. The resident is expected to review the clinical consequences of hormone deficiencies and hormone excesses, the principles of hormonal testing, i.e., stimulation and suppression testing, and finally the rationale behind treatment or non-treatment of endocrine disorders.

I. GOAL

To ensure that at the end of the residency training, each resident has had exposure to a wide variety of endocrine disorders through direct patient encounters or through didactic sessions.

II. CONTENT

- A. Neuro endocrine regulation and disease of the anterior pituitary and hypothalamus
 - 1. Hypopituitarism
 - 2. Pituitary tumors
 - 3. Acromegaly
 - 4. Hyperprolactinemia
- B. Disorders of the Neurohypophysis
 - 1. Diabetes Insipidus
 - 2. SIADH
- C. Thyroid Disease
 - 1. Hyperthyroidism
 - 2. Hypothyroidism
 - 3. Thyroiditis
 - 4. Thyroid cancer
 - 5. Thyroid nodule
 - 6. Goiter
- D. Parathyroid Glands
 - 1. Hyperparathyroidism
 - 2. Hypoparathyroidism
 - 3. Other hypo and hyper calcemic disorders
 - 4. Metabolic bone disease
- E. Diabetes Mellitus and complications
- F. Hypoglycemia
- G. Disorders of the adrenal glands
 - 1. Cushing's Syndrome
 - 2. Addison's Disease
 - 3. Primary aldosteronism
 - 4. Congenital adrenal hyperplasia
 - 5. Pheochromocytoma

H. Disorders of the ovary and female reproductive tract

1. Primary amenorrhea
2. Secondary amenorrhea
3. Androgen excess syndrome
4. Infertility
5. Hirsutism

I. Male reproductive disorders and gynecomastia

J. Obesity

III. TEACHING METHOD

A. SUBSPECIALTY ROTATION

1. All patients assessed by the resident on the inpatient and outpatient services will be seen and discussed by the attending physician. The treatment plan should be outlined by the resident and discussed with and approved by the attending physician.

Case discussions will include review of pertinent history and physical findings, appropriate laboratory investigations, health risk assessments and interactions between various disease states.

Didactic lectures will be presented on a regular basis covering common and uncommon clinical endocrine problems.

2. Reading: The resident is expected to read independently, reviewing basic physiology from medical and endocrinology texts and specific articles from journals, some of these being suggested by the attending.

B. LECTURES to be given at least every 2 years

1. Thyroid function test
2. Hyperthyroidism and hypothyroidism
3. Type 2 diabetes
4. Type 1 diabetes
5. Diabetic ketoacidosis
6. Cushing's disease
7. Hypercalcemia
8. Hyperprolactinemia
9. Hyperlipidemia
10. Osteoporosis

C. CONSULTATIONS

Residents will also have the opportunity to learn from inpatient consultations done by the Endocrinology Service as well as through the Endocrinology Services participation in general departmental conferences such as Grand Rounds, Journal Club, etc.

BIBLIOGRAPHY

1. ADA books on Diabetes Mellitus Types I and II
2. AMA Guidelines on Management of Diabetic Complications
3. Harrison's textbook of Internal Medicine
4. Cecil's textbook of Internal Medicine
5. Oxford's textbook of Internal Medicine
6. MKSAP
7. Current Medical Diagnosis and Treatment