

Endocrinology Rotation Clerkship Objectives

Topics:

- 1) Diabetes and lipids
- 2) Thyroid
- 3) Calcium / Bone
- 4) Adrenal
- 5) Reproduction
- 6) Pituitary

Diabetes:

Expectations – what you should have a solid knowledge of:

- 1) Pathophysiology of various types of diabetes
- 2) How to do a comprehensive history and physical on a diabetic patient
- 3) Long-term complications - how and when to monitor for these, and recommended strategies for reducing risks
- 4) Non-insulin medications used in management of type 2 diabetes – mechanisms of action, side effects, specific benefits and risks
- 5) Principles of insulin management - types of insulin, strategies of dosing including insulin sensitivity factor and carbohydrate counting
- 6) Safety issues in diabetes management – illness management, hypoglycemia

Diabetes Centre Calgary – shadow experience objectives:

1) Medical Expert:

Gain appreciation of the role of physician and educator in various aspects of diabetes care. This may include experience in any of the following: insulin initiation, use of carbohydrate counting, principles of insulin adjustment using insulin sensitivity factor, illness management teaching, hypoglycemia teaching, insulin pump education

2) Communicator - by observing a diabetes educator in action:

Develop a sensitive and compassionate approach to patients and their families living with diabetes. Liaise with the inter-professional team regarding the educational needs

of patients and patient-dependent characteristics that may assist other professionals with patient education

3) Collaborator:

Participate effectively and appropriately in an interprofessional healthcare team. Develop good team relationship skills & work effectively with allied health professionals at the DCC

4) Manager, Health advocate:

Learn how the outpatient services provided at the DCC can aid transition from inpatient to outpatient care. Advocate effective use of the outpatient resource available at the DCC.

Lipids:

1) Classify the lipid disorder

2) Know the different classes of lipid lowering medications, and for which lipid disorder each is effective

3) Know how to risk stratify patient to determine whether statin therapy is indicated – eg. Canadian Cardiovascular Guidelines

4) Know secondary causes of lipid disorders (medical conditions to rule out on presentation of a dyslipidemia)

Thyroid:

1) Approach to abnormal TSH

2) Approach to thyroid nodule

3) Causes of thyrotoxicosis and what features on history, physical, and investigations that will help differentiate the different causes

4) How to properly examine the thyroid gland and proper full physical examination to evaluate for features or complications of thyroid disease

5) Treatment of hypothyroidism and how to monitor

6) Treatment options for hyperthyroidism

Calcium and bone disorders:

- 1) Know the differential diagnosis and investigations for hypercalcemia and hypocalcemia
- 2) Know complications of primary hyperparathyroidism and indications for surgical management
- 3) Approach to low bone density – risk stratifying patient (FRAX score), approach to pharmacologic and lifestyle management

Adrenal:

- 1) Know the names, class, and actions of the four predominant hormones from the adrenal gland.
- 2) Approach to incidental adrenal nodule/mass.
- 3) Cushing syndrome – history and physical, differentiate diagnosis, how to investigate
- 4) Adrenal insufficiency – history and physical, how to diagnose, how to differentiate primary from secondary adrenal insufficiency, illness management

Reproduction:

- 1) Approach to amenorrhea/oligomenorrhea – know differential diagnosis, pertinent history and physical, and basic investigations
- 2) Approach to hirsutism – differential diagnosis and how history and physical can help differentiate the causes
- 3) Approach to hypogonadism in male – differential diagnosis, how history and physical exam can help differentiate causes including congenital vs. acquired and primary vs. centrally mediated

Pituitary:

- 1) Know the hormones and their actions (Go Look For The Adenoma Please!)
- 2) Approach to pituitary mass
 - How to properly investigate for hormone deficiencies and excess, and how this differs from investigating for primary endocrine gland disease (ie, central hypothyroidism vs primary hypothyroidism, etc)

- How to assess for mass effects

3) Hyperprolactinemia – approach, differential diagnosis, management

4) Clinical features of acromegaly and of Cushing syndrome

5) Post-operative issues in patient who has undergone pituitary surgery – what hormone deficiencies to anticipate and how to monitor

6) Central diabetes insipidus - how to diagnose