INTRODUCTION

Metabolism, Endocrinology, and Diabetes are essential fields of study for the effective internist. As obesity overtakes other conditions as the leading preventable condition contributing to morbidity, and as diabetes grows in prevalence, metabolic disorders are a driving force in healthcare. In addition, internists must have a finely-honed and astute approach to rational history and physical examination in order to differentiate suspected endocrinology disorders. The goal of the endocrinology and metabolism rotation is to refine the physician’s approach to common endocrinology problems seen in the primary care setting, as well as to provide opportunities to diagnose, evaluate, and manage rare endocrine and metabolic disorders.

EDUCATIONAL GOALS AND OBJECTIVES

Patient Care

The resident is expected to demonstrate progressive improvement in the following basic skills:
- Physical examination skills necessary for detection of common findings: thyroid nodules, thyromegaly, diabetic retinopathy, diabetic foot complications, diabetic neuropathy, and manifestations of glucocorticoid excess;
- History taking, medical decision-making, and clinical judgment necessary for development of diagnostic and management plans for common endocrinologic conditions;
- Appropriate ordering and interpretation of common radiologic diagnostic procedures, including bone mineral density, thyroid radionuclide and ultrasound studies, and hypothalamic/pituitary MRI.

By the end of the rotation, PGY-3 residents are expected to:
- Perform an endocrinologic history, physical examination and assessment
- Formulate a management plan
- Clearly document patient management in the medical record
- Make informed decisions on diagnostic and therapeutic interventions
- Counseling and educating patients and their families

Medical Knowledge

By completion of the rotation, residents will demonstrate knowledge of pathophysiology, clinical presentations, laboratory diagnosis, radiologic diagnosis, complications, and therapeutic modalities of the following common conditions, sufficient for diagnosis and initial medical management:
- Diabetes mellitus – types I and II
- Hypoglycemic syndromes
- Thyroid disorders
- Hypothalamic and pituitary diseases
- Hypercalcemia, metabolic bone disease, and vitamin D metabolic disorders
• Endocrine hypertension
• Adrenal disorders
• Lipid metabolism
• Nutrition and obesity
• Male reproductive disorders, including hypogonadism and impotence
• Female reproductive disorders, including amenorrhea and infertility
• Hormone-producing neoplasms

By the end of the rotation, PGY-3 residents are expected to:
• Recognize endocrine symptoms and signs of variety conditions
• Use medications appropriately
• Manage common endocrine syndromes
• Formulate differential diagnosis for common endocrine diseases

Practice-Based Learning

Throughout the rotation, residents will:
• In response to measures of diabetic quality care, personally monitor and strive to
  improve skills necessary for the optimal management of diabetic patients
• Demonstrate a willingness to learn from error, use information technology to support self-
  education, and facilitate learning of others.
• Identify deficiencies in knowledge base and develop independent means to address them
• Be able to perform a literature search to answer clinical questions
• Facilitate the learning of other health care team members

By the end of the rotation, PGY-3 residents are expected to:
• Appropriately select, recommend and interpret laboratory tests
• Employ medical knowledge to formulate evaluation and management plans for patients
• Demonstrate the ability to provide evaluation and management recommendation to primary care
  physicians

Interpersonal and Communication Skills

While on the rotation, residents will learn how to effectively employ interpersonal and communication
skills in a professional manner. He/she is expected to demonstrate competence in the following:
• Communicating effectively and compassionately with patients
• Effectively communicating patient’s needs to other providers
• Facilitating the functioning of a multidisciplinary team
• Applying interpersonal and communication skills to improve patient care

By the end of the rotation, PGY-3 residents are expected to:
• Recognize the importance of patient and community education in the treatment of metabolic and
  endocrine disorders, including diabetes, lipid disorders, and obesity.
• Demonstrate communication skills that support respectful patient-centered care.
• Provide professionally appropriate consultative opinions to patients with multiple medically
  undiagnosed symptoms that do not meet criteria for endocrinologic or metabolic abnormalities.
• Generate written documentation consistent with a hypothesis-generating approach to common
  endocrinologic conditions.
• Complete dictations in a timely manner using common documentation standards
Professionalism

Throughout the rotation, residents will
  • Respectfully and compassionately respond to patients with a multitude of phenotypic expressions of endocrinologic and metabolic disorders
  • Compassionately respond to socio-behavioral and psychiatric complexities of common endocrinologic conditions, including diabetes, obesity, eating disorders, and disorders of sexual maturation

By the end of the rotation, PGY-3 residents are expected to:
  • Comprehend the issues of elder safety, dignity, comfort, independence, and quality of life
  • Treat all patients, colleagues, and hospital/facility staff with respect and equality
  • Maintain patient confidentiality and HIPAA guidelines.

Systems-Based Practice

While on the rotation, residents are expected to demonstrate increased knowledge and the application of this knowledge to the following:
  • Understanding of and participation in the use of guidelines of care for endocrine conditions in health care delivery
  • Working as an equal member of a multidisciplinary team
  • Understanding appropriate referrals for diabetes dietitian, educators, podiatrists, ophthalmologists, and other medical subspecialties

By completion of the rotation, PGY-3 residents will:
  • Recognize the importance of coordination with surgical and radiotherapy colleagues for the care of patients with thyroid diseases, pituitary and hypothalamic diseases, parathyroid disease, endocrine hypertension, and hormone-producing neoplasms.
  • Coordinate diabetic team care, including the contributions of podiatric, nutrition, and nursing specialists.
  • Strive to facilitate care consistent with institutional initiatives for quality care of diabetes.
  • Strive to provide cost-effective care incorporating awareness of available ancillary services.