GOALS AND OBJECTIVES

Combined Neuroendocrine and Neurosurgery (Pituitary Clinic)

Tuesdays 8:00 a.m. – 12:30 p.m. / Center for Advanced Medicine, 6B
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Educational Goal and description of the rotation: The overall goal of this clinical rotation is for fellows to learn how to evaluate and treat pituitary and neuroendocrine disorders. The Pituitary Clinic is held one half day per week for 2 months. Fellows in Endocrinology, Diabetes and Metabolism see patients in the Pituitary Clinic typically during their first year of training in our subspecialty.

This service includes patients referred for consultation for pituitary and other CNS tumors, in addition to follow-up of patients with inoperable conditions and those who are post-operative and need medical care of their neuroendocrine conditions. The Pituitary Clinic is a combined clinic with both endocrine and neurosurgery attending physicians seeing and caring for patients. Their collaborative efforts provide expert care for a variety of medical and surgical neuroendocrine disorders. Endocrine fellows will be supervised directly by Dr. Julie Silverstein.

Educational purpose (curriculum): The specific educational purposes of this rotation are to provide the fellow with experience in the diagnosis, management and follow-up of outpatients with pituitary and other CNS disorders. The specific objectives of this rotation are to teach the fellow to become skilled in the evaluation and treatment of outpatients with hormonal disorders secondary to a pituitary or hypothalamic condition. The specific and most common disorders include prolactinoma, non-functioning pituitary tumors, acromegaly, Cushing’s syndrome and disease, craniopharyngioma, pinealoma and other infiltrative diseases. These patients will have manifestations of excess or deficiency of pituitary hormones.

Patient Care: Fellows will be responsible for obtaining the history and doing the physical examination on new or return patients. Fellows then present the case to the attending physician, and after discussion about the presentation, an plan is devised. As their expertise increases, fellows take more responsibility for the development of diagnostic and treatment plans. Fellows are expected to follow-up on patient test results, communicating the results to both the patient and referring physician.

Medical knowledge: We expect the fellows to 1) acquire the specialized knowledge of pituitary and neuroendocrine disorders needed to provide exemplary care to patients, 2) learn how to perform, interpret and cost-effectively use diagnostic testing essential for these disorders and 3) develop the abilities to critically evaluate clinical data relevant to neuroendocrine and to make appropriate management decisions.
Practice-based learning and improvement: Fellows will understand the limitations of their prior knowledge and work aggressively to improve the level of their expertise in the diagnosis and management of complex endocrine disorders.

Interpersonal and communication skills: By their second year, fellows are expected to be able to communicate comfortably and effectively with a wide range of patients.

Professionalism: The fellow must demonstrate professionalism, humanism and ethics coupled with sensitivity to cultural, occupational, environmental, socioeconomic and behavioral issues. This is made possible by the racial/ethnic and socioeconomic diversity of our patient population, which is drawn from inner city, middle class, suburban, rural and distant referral areas, and the sensitivity of our faculty to the importance of the ethical care of patients.

Systems-based practice: The fellow needs to be adaptable to the role of the endocrinologist, and expectations of a medical specialist when working with surgical colleagues. The fellow should become proficient at utilizing the EHR to maximal advantage, incorporating test results and opinions of colleagues in summary reports.

Teaching methods: The teaching methods will be derived from the experiences in the diagnosis and management of each patient, discussions with both the attending endocrinologist and the attending neurosurgeons. Patients will be discussed at length, and written histories and physicals reviewed with the attending physician.

Methodology for Teaching: For each of the major dimensions of the curriculum teaching is carried out under the supervision of a member of the faculty in the educational settings detailed below through the use of the following discrete methods:

- Performance of a history and physical examination on patients with endocrine-metabolic disorders.
- Presentation to a faculty member of the historical data and physical findings for both inpatient and outpatient encounters. The faculty member confirms and/or corrects the clinical data at the bedside or in the clinic examination room.
- Progressive, graduated responsibility for the development of diagnostic plans based on available clinical data.
- Progressive, graduated responsibility for the development of treatment plans based on clinical data and results from diagnostic testing.
- Directed reading based on patient encounters and references provided by faculty members individually and through the conferences.
- Progressive, graduated responsibility for communication of the findings with the patient and the referring physician, integration of new information from the patient, the referring (often primary care) physician, the patient’s course and the laboratory, and systematic follow-up.
- Attendance and participation in the following conferences: Metabolism Grand Rounds (Metabolism, Obesity and Diabetes Seminar), Internal Medicine Grand Rounds, Postgraduate Clinical Endocrinology Course, Endocrine Case Conference, Endocrine Oncology Conference, Pituitary Conference, and Bone Clinical Case Conference.
Fellows are supervised by faculty in all patient encounters. While fellows are given progressively increasing responsibility for their patients, each patient they see is also seen by a member of the faculty.

**Mix of diseases:** The pituitary service includes disorders such as prolactinoma, non-functioning pituitary and hypothalamic tumors, acromegaly, Cushing’s disease and Cushing’s syndrome, other rare pituitary tumors, infiltrative diseases of the pituitary, pituitary hormone deficiencies and excess, and other rare neuroendocrine disorders.

**Reading lists and other educational materials:** Fellows are expected to read about their patients’ problems and incorporate the new information gained into the care of those and future patients. This is facilitated by the availability to all fellows of online services such as “Up-to-Date in Endocrinology.” References to specific patient-related issues are provided by the faculty working with the fellow in inpatient and outpatient settings and references to specific topics are provided in conference/handouts.