

METABOLISM, ENDOCRINOLOGY, AND NUTRITION CONSULT SERVICE
Locations: University of Washington Medical Center, Harborview Medical Center
and VA Puget Sound Health Care System

FACULTY CONTACT: Dr. Alan Chait
Professor of Medicine and Division Head
Division of Metabolism, Endocrinology, and Nutrition
Box 356426
Phone: 206-543-3158
Email: achait@u.washington.edu

OVERALL EDUCATIONAL PURPOSE

To learn inpatient consultation management and efficient outpatient management of patients with endocrine disorders

To learn inpatient and outpatient management of patients with diabetes mellitus, including ketoacidosis, non-ketotic hyperosmolar coma, simple glycemic control, management and prevention of diabetic complications, and adjusting insulin and/or oral hypoglycemic therapy for procedures or surgery

To be able to recognize and treat life threatening endocrine disorders such as thyroid storm, myxedema coma, hypertensive crises from pheochromocytoma, and adrenal crisis

To learn how acute and chronic illnesses affect a variety of endocrinologic organ systems

To efficiently evaluate the endocrine systems of acutely and chronically ill patients, including the role of stimulation and suppression testing and imaging studies

To learn the assessment of nutritional status in the acutely and chronically ill patient

To learn the principles and delivery of enteral and parenteral nutritional support

TEAM STRUCTURE

Teams on the inpatient consult service consist of an Endocrinology Attending, usually one fellow, one R2 or R3, ± a fourth-year medical student. In outpatient clinics, residents take primary responsibility for seeing new or returning patients and present these cases to one of the attending faculty for discussion and formulation of a care plan.

PRINCIPAL TEACHING METHODS

Case discussion and review

The Endocrinology fellow and faculty attending review and discuss all cases on the inpatient consultation service with the resident.

Rounds

The consult team makes daily or every other day rounds on all inpatients on the service. Clinical findings are discussed, results of laboratory evaluation are reviewed, and imaging studies are interpreted with the help of the radiology staff.

Didactics

Weekly post-clinic conferences and research conferences are held at each affiliated hospital. A weekly didactic conference is held followed by an Endocrine Teaching Conference that focuses on a recent journal article of clinical interest. These sessions are held at Harborview Medical Center and are attended by faculty and trainees from all sites. Residents may attend monthly seminars sponsored by the Diabetes Endocrinology Research Center and the Clinical Nutrition Research Unit.

EDUCATIONAL CONTENT

Mix of diseases

The full range of disorders of metabolism and endocrinology is encountered, with special emphasis on diabetes, lipid disorders, and disorders of the hypothalamic-pituitary-peripheral gland axes.

Patient characteristics

Adult patients are seen at the UWMC, HMC, and VAPSHCS reflecting a full range of the socioeconomic spectrum. The ethnic mix reflects that of the Pacific Northwest region, largely that of Seattle and King County. About one-half of the patients have diabetes.

Types of clinical encounters

Patients are seen in consultation and follow-up on the inpatient service, and as outpatients in ambulatory clinic follow-up after discharge. Residents also participate in the evaluation of newly-referred outpatients.

Procedures

Evaluation of complex endocrine system function by means of stimulation and suppression testing is a major focus on the inpatient service. Residents may get the chance to observe fine needle aspiration of the thyroid, the only procedure commonly performed by endocrinologists.

Services

All sites provide a full range of specialty and subspecialty services. The Division of Metabolism, Endocrinology, and Nutrition has full access to the extensive laboratory, radiologic and other services at each site. For patients with diabetes, hypertension, or hyperlipidemia, nutritional services are frequently utilized in patient evaluation and education.

ROTATION SPECIFIC SCHEDULE

Monday	9:00 am – 12:00 pm	Inpatient Consult Service
	1:00 pm – 5:00 pm	UWMC Endocrinology Clinic
	5:00 pm – 6:00 pm	Post-clinic conference

Tuesday	8:30 am – 12:00 pm	HMC Northwest Lipid Research Clinic
	12:00 pm – 1:00 pm	Post-clinic conference
	2:00 pm – 4:00 pm	Inpatient Consult Service
	4:00 pm – 5:00 pm	Didactic session at HMC
	5:00 pm – 6:00 pm	Endocrinology teaching conference at HMC

Wednesday

Base UWMC:

9:00 am – 12:00 pm	Inpatient Consult Service
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Base HMC:

7:30 am - 12:30 pm	HMC Endocrine Continuity Clinic
1:00 pm – 4:30 pm	Inpatient Consult Service

Thursday	9:30 am – 12:30 pm	UWMC Lipids and Nutrition Clinic Service
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Friday	8:30 am – 12:00 pm	Diabetes Care Center Clinic
	12:15 – 1:30 pm	Post-clinic conference
	2:00 pm – 4:30 pm	Inpatient Consult Service

CALL AND WEEKEND RESPONSIBILITIES

No in-house call. The Endocrinology fellows and scheduled residents take call (by phone) one to two weekends during the rotation for all three hospitals. The attending faculty at each hospital serves as backup for all night and weekend call.

PRINCIPAL EDUCATIONAL MATERIALS USED

Recommended readings

Books and journals are available in the Division library or the Health Sciences library. Photocopying of articles is encouraged. All residents have access to computers for literature searching. The Endocrinology Course Syllabus is available for use.

Pathological materials

Residents are encouraged to review thyroid needle aspirate cytology and operative pathological specimens with Pathology Department staff.

METHODS USED IN EVALUATING RESIDENT AND PROGRAM PERFORMANCE

At the start of the rotation the Attending reviews with the team members the goals and expectations for the rotation. At the end of the rotation, the attending meets with each team member individually to provide verbal feedback. The resident is evaluated electronically and performance reviewed verbally by every attending and fellow s/he has interacted with for a significant amount of time. The evaluator rates the resident on a nine-point scale in each component of clinical competence (i.e. patient care, medical knowledge, practice based learning

improvement, interpersonal and communication skills, professionalism, system based learning, educational attitudes, leadership, overall clinical competence).

The resident is given the opportunity to electronically evaluate the quality of the curriculum and the extent to which the educational goals and objectives of the rotation have been met. The resident also evaluates the teaching competence of each attending and fellow with whom s/he has interacted for a significant amount of time.

EXPLICIT LINES OF RESPONSIBILITY FOR CARE OF PATIENTS ON THIS SERVICE

The attending physician is ultimately responsible for all patients seen. Daily interaction and discussion of patients and patient-related issues occurs between the resident and the Endocrinology fellow. Inpatient consults are evaluated initially by the resident and then reviewed by the fellow and attending. Outpatients are evaluated initially by the resident and then discussed and reviewed with the attending directly.