

Hepatology Service Rotation Curriculum

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I. Educational Purpose and Goals

The hepatology rotation allows residents and fellows to refine history and physical exam skills, develop experience in management of a variety of hepatological diseases. The hepatology inpatient service will consist of Hepatology Intern, Hepatology Fellow and Hepatology Attending. Most months a resident will be part of the team as well.

II. Principle Teaching Methods

A. Supervised Direct Patient Care: Residents encounter patients admitted to the hepatology service at University of Colorado Hospital and are responsible for admitting patients to the service between the hours of 8am to 5pm, M-F. In addition to supervising the residents and caring for patients on the hepatology service, fellows are responsible for managing post transplant patients on the surgical service.

B. Required conferences- in addition to the required general medicine conferences (and GI conferences for fellows) the hepatology team members must attend Patient Selection Committee, Thursdays 7:00am, Liver Pathology Conference, Thursday, 8:00am and Hepatobiliary Conference, Friday Noon.

C. Didactic Sessions- We hold twice weekly on-service teaching seminars, which are taught by the fellow or attending. Potential topics are the items listed in section III.A. as well as transplantation issues for internists, liver disease in pregnancy and evaluation of hepatic mass.

III. Educational Content

A. Mix of Diseases- Encountered patients have a variety of hepatological disorders which may include the following: Asymptomatic elevation in LFTs, NASH, alcoholic hepatitis, acute hepatitis, fulminant hepatic failure, chronic hepatitis (HCV, HBV, AI-CAH, Drug induced, Wilson’s Disease) hemochromatosis, PBC/PSC, and cirrhosis. In addition

B. Patient Characteristics

C. Learning Venues

D. Procedures- Certain procedures will be performed by the intern under supervision of resident/hepatology fellow and attending. These include: IV access, Paracentesis, thoracentesis, NG tube placement, and flexible sigmoidoscopy. All GI procedures including EGD, colonoscopy and liver biopsy will be done by the hepatology fellow under the supervision of the hepatology attending.

E. Structure of Rotation: PGY 1: The primary responsibility of the intern will be to admit patients to the service during the hours of 8am to 5pm, M-F. The intern will admit no more than 5 patients per day during this period of time and he/she will not carry more than 12 patients on his service at any point in time. Residents may carry an additional 4 patients. If the inpatient service exceeds 16 patients, the hepatology fellow will take primary responsibility for the additional patients. The

intern will not take night call. The hepatology intern will sign out (in writing) to the on-call intern each evening prior to leaving the hospital. Hepatology fellows must be called with ALL admissions. The intern will not participate in care and/or management of liver transplant recipients that are on the transplant surgical service. Patients admitted after 5pm will be evaluated by either the on-call medicine resident or the Hepatology fellow. Patients will transfer from the night admit team to the inpatient Hepatology service the next morning. Approval of transfers to the Hepatology inpatient service is the responsibility of either the Hepatology fellow or Hepatology Attending, not the Hepatology intern. PGY 4, 5, and 6: Fellow responsibilities include: management of post-transplant cases on the surgical service (as a member of team), supervision of the Hepatology intern in terms of both patient care and procedures, management of ICU patients, performance of all GI procedures (EGD, colonoscopy, liver biopsy, etc), consultations directed to the Hepatology Service, and assistance with recruitment, retention and performance of the clinical research activities of the section.

Specifically:

- 1) Fellow is responsible for running the service
- 2) Housestaff must call fellow to discuss all admissions
- 3) Fellow must see all patients in the MICU regardless of admission time
- 4) If there are patients in the MICU on fellow's clinic day, fellow must see them prior to clinic
- 5) If fellow has any questions (at any time), contact attending. We are available 24 hours a day.
- 6) When a patient of ours is unstable at night, fellow must go to the hospital to help out the housestaff
- 7) Touch base daily with surgeons and post-transplant coordinators regarding inpatients
- 8) Touch base with post-transplant coordinators regarding inpatients and discharge plans
- 9) Touch base with pre-transplant coordinators regarding inpatients and discharge plans
- 10) See patients in OIP when necessary
- 11) Sign out to weekend on call fellow
- 12) Afternoons are "free" for teaching, performing procedures on inpatients and/or post transplant patients, seeing consults, attending outpatient hepatology clinics
- 13) Fellow must attend normally assigned weekly continuity clinic
- 14) Fellow must answer outside calls and touch base with nurses and/or attending.
- 15) Participate in education of housestaff
- 16) Pick up hepatology reading material from Dr. Forman

IV. Principal Ancillary Educational Materials

A. All fellows are provided with the Fellowship Handbook including the Fellows curriculum and learning objectives for each rotation prior to the start of

fellowship. The hepatology curriculum and learning objectives are distributed to each fellow and resident prior to the start of the hepatology rotation.

B. Residents and fellows are provided with additional targeted reading materials specifically chosen by the hepatology attendings. The set of articles includes key information about the diagnosis, treatment and management of hepatological diseases and is reviewed annually to ensure it is up to date.

C. Computer based resources are available to the resident and fellow at the University of Colorado Hospital to facilitate patient care, education and communication.

V. Methods of Evaluation

A. Resident Performance

Residents are evaluated by the attending via New Innovations at the end of the rotation. It is expected that the residents receive ongoing verbal feedback from both the hepatology fellow and attending throughout the rotation. The evaluation form centers around the 6 ACGME competencies and completed evaluations are available to the residents online at any time.

B. Program and Faculty Performance

The resident and fellow evaluate attendings at the end of the hepatology rotation. These evaluations are anonymous to ensure the resident/fellow can be completely open. The evaluations are held from the faculty until sufficient evaluations are completed as to further guarantee anonymity. These evaluations are tools used by the Division Head when conducting annual performance reviews.

VI. Institutional Resources: Strengths and Limitations

A. Strengths

1. The hepatology program strives for excellence in the three main missions of the Division of Gastroenterology and Hepatology and the Department of Medicine: clinical care, research, and education. The clinical program is highly developed and encompasses both inpatient and outpatient services and consultative practice. We provide expert consultation on liver cases referred from both primary care physicians and gastroenterologists throughout Denver and the Rocky Mountain region. Our Hepatologists run outpatient clinics Monday through Friday and supervise and staff outpatient clinics for the post-transplant management of liver recipients. The clinic material spans the breadth of the field of hepatology including viral hepatitis, liver tumors, autoimmune diseases, Cholestatic diseases, fibrocystic diseases, vascular diseases, and all aspects of hepatic transplantation. Approximately 90 to 100 liver transplants are performed annually; outcomes rank among the best in the United States, and both deceased and living donor liver transplants are performed.

B. Limitations

1. Adequate conference space for post round report.
2. Inconsistent resident participation as the rotation is elective for PGY 2s and 3s.