

Rotation: Cardiomyopathy and Heart Transplantation (CHF-TX1)

Director: Dr. Stuart Russell

Faculty: Drs. Russell, Judge, Barouch, Kasper, Najjar, Wittstein

Standard Rotation Hours: Mon - Fri, 8am to 7 pm; Every other Sat and Sun 8 am to 3 pm.

A. CHF/Transplant: Patient Care

	Principal Educational Goals	Learning Activities	Evaluation Methods
1.	Ability to obtain a complete medical history, perform a careful and accurate examination with emphasis on the cardiac exam, and review charts and pertinent records.	DPC, AR, IL	AE
2.	Ability to write a concise evaluation, assess the cardiovascular risk of the patient and make therapeutic decisions and proper interventions based on patient preferences, scientific evidence, and sound clinical judgment.	DPC, AR, CAC, EC, ECG, DSP, NC, FS, IL	AE
3.	Effectively evaluate and manage patients with complex cardiac illnesses, particularly, congestive heart failure, ventricular assist device and cardiac transplantation patients.	DPC, AR, FS, CAC, EC, HR, DSP, CC	AE
4.	Ability to risk stratify patients after being evaluated by echocardiography, cardiac stress test, coronary angiograms, nuclear cardiovascular procedures and other invasive and non-invasive procedures.	EC, ECG, CAC, HR, IC, IL, CC	AE
5.	Ability to manage patients who have had left and right catheterization, heart transplantation and devices.	DPC, HR, CAC, CC, FS	AE, DSP
6.	Effectively direct the team performing CPR and advance cardiac life support in heart failure and transplant service.	DPC, EP, IL	AE
7.	Ability to manage complications from invasive and heart transplantation related procedures.	DPC, FS, CAC, IC	AE
8.	Ability to participate in behavior modification and strategies to educate patients and other health professionals in the management of heart transplant and heart failure.	DPC, AR, PCF, ACS	AE
9.	Participation in the discussion of end-of-life issues with patients and their families.	DPC, FS, EI	AE, PR
10.	Participation in all non-invasive and invasive cardiovascular procedures using the proper technique and under the supervision of a teaching faculty. Observe heart transplantation operation and organ procurement.	DPC, FS	AE, DSP

B. CHF/Transplant: Medical Knowledge

	Principal Educational Goals	Learning Activities	Evaluation Methods
1.	Familiarity with the newest basic science concepts and mechanisms of heart failure and transplantation.	CC, RC, NC, JC	AE, ECR
2.	Familiarity with current medical literature, clinical trials, and evidence based medicine in heart failure and transplantation.	IL, JC, CC	AE
3.	Familiarity with the broad spectrum of heart failure and transplantation.	IL, CC, NC, PR	AE, ECR
4.	Familiarity with the pathophysiologic Principals of heart failure and	IL, NC, HR	AE, DSP

	transplantation.		
--	------------------	--	--

C. CHF/Transplant: Interpersonal Skills and Communication

	Principal Educational Goals	Learning Activities	Evaluation Methods
1.	Communicate effectively the consult findings with physician colleagues and other members of the health care team in a timely fashion to assure a comprehensive patient care.	DPC, AR, PC	AE, PR
2.	Present professional findings to patient and family members in a compassionate and informative manner.	DPC, AR	AE, PR
3.	Provide educational instructions and other learning tools to patients to reinforce behavioral modification.	DPC, AR	AE, PR

D. CHF/Transplant: Professionalism

	Principal Educational Goals	Learning Activities	Evaluation Methods
1.	Interact professionally with patients, patients' family, colleagues, and other members of the health care team.	DPC, AR, PC	AE, PR
2.	Appreciation of the cultural, spiritual and social context of wellness and illness.	DPC, AR, EI	AE

E. CHF/Transplant: Practice -Based Learning and Improvement

	Principal Educational Goals	Learning Activities	Evaluation Methods
1.	Commitment to scholarship and the use of evidence based cardiovascular medicine.	JC, RC, AR	FP, PR
2.	Broad reading of the cardiovascular literature and access and research of Medline and internet tools.	JC, RC, AR	FP, PR

F. CHF/Transplant: Systems-Based Practice

	Principal Educational Goals	Learning Activities	Evaluation Methods
1.	Understand the complexities of cardiovascular disease patients and utilize the multidisciplinary resources necessary to care for them.	DPC, AR, GR	AE
2.	Collaborate with other member of the health care team to assure comprehensive cardiac care.	DPC, AR	AE
3.	Understand the system complexities in invasive and noninvasive cardiology.	DPC, AR, GR	AE
4.	Willingness to learn by participation in ward rounds, teaching conferences and other educational activities.	DPC, AR	AE

5.	Effective utilization of risk stratification using evidence-based medicine.	DPC, AR, NC, IL	AE
6.	Develop effective communication with referring physician, health care team, patient and their family, regarding purpose and findings of the consult.	DPC, AR	AE
7.	Expand learning in outpatient ultrasound and nuclear cardiology to optimize understanding of patients risk stratification.	DPC, AR, EC	AE
8.	Consideration of cost effectiveness and outcome measurements of tests and interventions associated with consultations.	DPC, AR, GR	AE

Objectives and expectations on this rotation

Through active participation and care of patients admitted to this Service, seen in clinic, and in consultation it is expected that you will demonstrate:

- An understanding of the causes of heart failure.
- The appropriate evaluation and management of patients with cardiomyopathy.
- An understanding of the pathophysiology of heart failure.
- The treatment of patients with acute and chronic heart failure due to systolic and diastolic dysfunction.
- Active participation in the care of patients undergoing heart transplantation.
- An understanding of the indications and contraindications for heart transplantation.

Learning activities

- Right heart catheterization as performed in the catheterization laboratory
- History and physical examination of patients with heart failure.
- Basic endomyocardial biopsy interpretation (rejection vs. normal).
- Cardiopulmonary exercise stress testing.

Content and methods

- The content is learned through active participation on the clinical service
- Active participation in the Tuesday 4PM Heart transplant meeting is expected.
- Daily review of endomyocardial biopsy specimens is expected.
- Outside reading of appropriate ACC/AHA Guidelines is strongly encouraged.

Supervision:

You are supervised by the Procedure Attending for cases in the catheterization lab and by the Service Attending in all other circumstances. In the rare event that these attendings are not available, Dr. Stuart Russell, the Director of the Service, should be contacted.

Evaluation Process: (fellows will be evaluated on each rotation using a competency-based system on E-Value)

You will be evaluated by the Procedure Attendings in the catheterization laboratory (Drs. Russell and Hare regarding procedural skills and will evaluate what you do as you do it and provide immediate feedback through discussion.

The Attending on the service will also evaluate you regarding clinical skills not related to the catheterization lab; specifically, you will be evaluated on the following areas:

- ability to perform right heart catheterization and your knowledge of the indications and complications (the attending will be present for the entire case and question you before, during and after the case).

- understanding of the diagnosis, evaluation and management of patients with heart failure
- discussion of cases and care of patients
- understanding of the criteria for heart transplantation.
- recognition of rejection on endomyocardial biopsy (the Service Attending will evaluate you during the daily review of endomyocardial biopsies.
- demonstration of the values of professionalism including placing the needs of patients first, maintaining a commitment to scholarship, and helping colleagues (the Service Attending will evaluate this throughout the course of the month)

