

ROTATION DESCRIPTION

ROTATION TITLE: Cardiothoracic/Heart Transplant Surgery Rotation

SITE DESCRIPTION (common diseases states treated, patient demographics, etc):

GOAL: To become proficient in critical care principles pertaining to the care of cardiothoracic as well as heart transplantation patients.

OBJECTIVES:

1. Have a general understanding of heart disease states that may be amenable to palliation or correction with cardiac surgery:
 - coronary artery disease, MI
 - valvular heart disease
 - arrhythmias

2. Have a general understanding of general cardiac surgery procedures, complications, management and outcomes:
 - coronary artery bypass grafting (CABG)
 - valvular surgery
 - automatic implantable cardioverter defibrillator (AICD)
 - pacemakers
 - bleeding, infection stroke, MI
 - antibiotics, nutrition, hemodynamic monitoring and management

3. Have a general understanding of disease states that may be amenable to palliation or correction with thoracic surgery:
 - lung cancer
 - thoracic trauma
 - esophageal cancer
 - empyema
 - aortic dissection
 - malignant pleural effusions
 - esophageal rupture
 - spontaneous pneumothorax

4. Have a general understanding of general thoracic surgery procedures, complications, management and outcomes:
 - decortication, pleurectomy, pleurodesis, thoroscopy, wedge resection, lobectomy, pneumonectomy, esophagectomy
 - bleeding, infection, malnutrition, pneumothorax
 - antibiotics, nutrition, chest tube management, hemodynamic monitoring, ventilator management

5. Have a general understanding of indications for heart transplantation:
 - end stage idiopathic cardiomyopathy, ischemic cardiomyopathy, refractory arrhythmias none of which can be treated with other medical or surgical interventions, etc.

6. Have a general understanding of the surgical procedures, complications, management and outcomes associated with heart transplantation:

- heart transplant
 - infection, rejection, medication adverse effects
 - immunosuppression, prophylactic/treatment antibiotics, nutrition, HTN, etc.
 - general overall survivability for each patient group
7. Have an in depth understanding of general principles involved with the management of a critically ill patient:
- ventilator management
 - hemodynamic monitoring
 - management of use of inotropic, vasodilators and vasoconstrictor medications
 - fluid, electrolyte and acid base status
 - issues surrounding the prophylaxis and treatment of infections and general antibiotic management
 - prophylaxis and treatment of other potential ICU problems (i.e. DVT/PE, stress ulcer/GI bleeding, etc.)
 - nutritional management
 - pain, sedation and paralytic management
 - use of blood products and other colloids
 - management and drug dosing in patients with various degrees of multi-system organ failure

ROTATION PRECEPTOR(S): Walter E. Uber, Pharm.D., Clinical Associate Professor of Pharmacy, Clinical Specialist: Cardiothoracic Surgery and Heart Transplantation

ROTATION RESPONSIBILITIES:

The resident will be required to participate in the following clinical pharmacy activities:

1. Through daily rounding with physicians (medical students, residents, fellows and attendings) on the Cardiothoracic and Heart transplant teams, the resident will provide therapeutic drug monitoring considering efficacy, safety and cost.
2. Provide the surgical team, nursing, pharmacy, and other health care practitioners involved in the care of their patient with drug information and necessary literature support.
3. Will provide both verbal and written pharmacokinetic consultation when required.
4. Will provide physician, nursing and pharmacy in-services when required.
5. Will participate in patient education when required.
6. Will participate in the teaching of undergraduate and Pharm.D. students on rotation when required.

ACTIVITIES:

Cardiothoracic surgery team rounds with cardiothoracic surgery fellows, general surgery residents and medical students begin at 5:45 a.m. – 7:00 a.m. and again at approximately 4:00 p.m. – 5:00 p.m. Monday through Friday depending on caseload.

Rounds on heart transplant patients with transplant team (attendings, fellows, residents and students, nursing case managers and PA's) are in the afternoon at approximately 3:00 p.m. – 4:00 p.m. Monday through Friday.

Pharmacy teaching rounds with the preceptor are from 10:00 a.m. – 12:00 p.m. Monday through Friday.

As patient care requires, the above listed times may vary.

Required meetings/presentations

Residents are also required to attend selected conferences and seminars offered by the Department of Hospital Pharmacy Practice and Administration and the Departments of Medicine and Surgery.

Required readings

- Readings for this rotation are provided in a rotation reading book and is continuously updated

METHOD OF EVALUATION:

Evaluation of residents will be based on the Resident Learning System. The RPD will identify the specific goals and objectives on which the resident will be evaluated and will give the evaluation form to the preceptor and resident by the first day of the rotation. The individualized evaluation tool will be reviewed by the resident and preceptor to guide the learning experiences of the resident within the scope of the service and required patient care.

MONTHLY RLS WILL BE ATTACHED.