Transplantation

Description of Rotation:
Solid organ transplantation touches on all aspects of clinical pharmacy, encompassing internal medicine, critical care, and infectious disease. As a member of the transplant team the pharmacist is a resource and knowledgeable of medication management of critically ill patients with emphasis on immunosuppressive agents.

Goals of Rotation:
Facilitate student learning and critical thinking skills in a transplant in order to:

1. Be able to describe the symptomatology, physical finding, pathophysiology, diagnostic procedures, laboratory test, and treatment option for all patients on service
2. Understand the utilization of immunosuppressive drugs used for transplantation
3. Understand the post-transplantation complication (rejection, delayed graft function, drug toxicity, infection, bone and mineral metabolism, post-transplant DM)

Learning Objectives:

1. Understand patient healthcare needs.
2. Apply evidence-based medicine.
3. Enhance and reinforce didactic course work.
4. Develop interpersonal communication skills.
5. Describe the pathophysiology of common illness.
6. Explain monitoring parameters given the particular disease state and the treatment regimen (including efficacy, toxicity, side effects, and potential drug interactions).
7. Provide non-pharmacological treatment for disease states.

Upon completion of this rotation the student should be able to:

Activities:

1. Patient interviews and care plans
2. Case/disease state presentations and discussions
3. Research drug information question
4. Educational programs
   a. Patients
   b. Medical Staff
   c. Students
5. Newsletter
6. Physical Assessment
7. Define patient goals for each disease state
8. Data collection
9. Required Readings

Common disease states encountered in transplant (*list not inclusive*)

1. Heart
2. Intestine
3. Kidney
4. Liver
5. Lungs
6. Pancreas

Potential longitudinal activities to accomplish at site:

1. Identify and collect appropriate drug-related monitoring parameters for each assigned patient
2. Maintain an adequate patient data base for each assigned patient
3. Identify and prioritize drug-related problems for each assigned patient
4. Assess the appropriateness of each assigned patient’s drug therapy
5. Construct a detailed pharmacotherapeutic plan for each assigned patient
6. Present all patient data in a concise and meaningful fashion
7. Provides evidence-based regimens and monitoring plans for each patient
8. Obtain and write-up a patient medication history
9. Provide medication information to a unique cultural and socioeconomic diverse patient
10. Provide a recommendation and counseling on an OTC product
11. Counsel a patient on their medications
12. Provide a verbal therapeutic plan recommendation to another health-care professional
13. Perform medication reconciliation for patients
14. Interpret diagnostic test results for a patient/caregiver/or preceptor
15. Take a patient’s blood pressure
16. Take a patient’s pulse
17. Assess a patient’s peripheral edema
18. Take a patient’s respiratory rate
19. Assess a patient’s temperature
20. Provide an optimal pain management or palliative care plan for a patient
21. Observe a Health Care professional perform a full physical examination and assess results
22. Make a warfarin dosage adjustment based on patient parameters
23. Recommend empiric antibiotic therapy
24. Recommend antibiotic therapy based upon a culture and sensitivity
25. Assess the significance of a drug-drug interaction
26. Adjust a drug dose in a patient with renal insufficiency
27. Determine monitoring parameters for a patient being treated for an infectious disease
28. Prepare a written pharmacokinetic consultation
29. Prepare a handout for case presentation
30. Prepare an article for a newsletter or publication
31. Prepare a patient education sheet
32. Prepare a written drug information response in a practice setting
33. Provide an education presentation to pharmacists
34. Provide an education presentation to other health care professionals
35. Lead a Journal Club discussion
36. Participate in a Patient/Medication Safety Review or error reduction program
37. Participate in a discussion of a pharmacist role in ethical issues related to any of the following topics: end of life care, professional behavior, clinical research, and pharmacy current event/hot button issue