UCLA General Surgery Residency Program  
Rotation Educational Policy  
Goals and Objectives

UPDATED: August 2009

ROTATION: SURGICAL CRITICAL CARE AND TRANSPLANTATION SURGERY

ROTATION DIRECTOR: Gerald Lipshutz, M.D.

SITE: UCLA Medical Center

LEVEL OF TRAINEE: R4

GOALS:

R4: To gain exposure in the performance of organ procurement for transplantation, technical proficiency in kidney transplantation, and assisting in the performance of liver and pancreatic transplantation. Residents will also be involved in evaluation of complex hepatobiliary patients, operative interventions, and assist in oversight in the care of patients on the service.

DESCRIPTION OF ROTATION:

The UCLA Abdominal Transplant Programs are one of the largest in the world. The services perform roughly 200 liver, 300 kidney, 8-12 small intestine, and 15-20 pancreas transplants per year. In addition, the liver division also has a high volume hepatobiliary-pancreatic surgery component. The Transplantation Surgery Service consists of 1 month in the R1, 1 month in the R2, and 2 months in the R4 year. The R1 will have additional exposure to kidney transplantation on the Urology rotation.

LEVEL OF TRAINEE: R4

R4s on this service will be primarily responsible for learning the operative procedures of the transplant service and for overseeing care of the patients. The R4 resident will be in the unique position of being on two separate services: 1) the liver and pancreas transplant service and 2) the kidney transplant service. These experiences will be combined to give a wide breadth of the transplant experience in all abdominal solid organ transplantation.

Responsibility:

1. R4 residents are responsible for overseeing the care provided of pre- and post-transplant patients admitted to the Service as well as those patients admitted for other surgical procedures.
2. Residents must co-sign all orders/notes by students
3. The operative consent is discussed with the patient by the Attending and/or transplant fellow. The patient’s signature is obtained by the house staff at the time
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of transplant. The R4 should ensure that this is completed before the patient is brought to the operating room.

4. House staff are expected to dictate all discharge summaries STAT.

5. Morning rounds are conducted by the transplant fellow. House staff including R4s are expected to be present for a prompt start at 6:30 am.

6. Afternoon rounds start at 1 pm for the Kidney and Pancreas patients. R4s are expected to attend when available.

7. The primary responsibility of the R4 resident is to be in the operating room and assisting with surgical procedures.

8. Postoperative notes should be written on patients where the R4 participated in their operative procedure.

9. Daily notes or review of the R1/2 note should be performed by the R4 if they participated in the operative procedure on a patient.

10. The resident is expected to attend the educational conferences of the division including morbidity and mortality conference and grand rounds (dates vary).

11. Residents are expected to not stay beyond 80 hours per week and are expected to follow the work hours regulations established by the RRC.

12. R4 residents are expected to ‘sign-out’ the status of any issues on patients that they are involved with to the night resident and transplant fellow before leaving the hospital.

Major Objectives:

1. Demonstrate knowledge of and acquire the surgical expertise of the kidney transplant recipient operation.

2. Develop familiarity with and assist with the liver transplant operation.

3. Participate in the organ procurement operation and assist in the preparation of the liver and kidney allograft for transplantation.

4. Develop familiarity with and assist with the pancreas transplant operation.

5. Develop familiarity with and assist with the small intestinal transplant operation.

6. Gain greater understanding of the mechanisms of pharmacologic immunosuppression used with organ transplantation, side effects, and indications for use of various agents.

7. Participate in hepatobiliary surgery operations and understand the surgical anatomy of the liver and porta hepatitis and how their anatomy affects liver resection surgery.

Typical Week:

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<td>Resident 7am-7pm</td>
<td>*</td>
<td>6:30 am Lv rounds Operating Room 1:00 pm</td>
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<td>7-10:00am GS Conf Operating Room 1:00 pm KP</td>
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SURGICAL CRITICAL CARE AND TRANSPLANTATION SURGERY- 2
**Competency-based Goals and Objectives:**

**Educational Methodology:** The resident will achieve the stated objectives using the following methods:

1. Direct involvement in patient care and management, under the supervision of faculty (transplant, pulmonary-critical care, and anesthesia).
2. Personal performance of procedures.
3. Attendance of lectures and conferences.

Monitoring of the accomplishment of these objectives will be performed using the following methods:

1. Assessment by the faculty-attending surgeons during resident/attending interaction in the course of the delivery of patient care.
2. End of rotation evaluation of resident performance to assess the resident’s demonstrated fund of knowledge with respect to the stated objectives.
3. Performance on the annual ABSITE examination, Clinical Management and Basic Science sections.

**Patient care:**

1. Participate in the pre- and post-operative surgical management of patients after organ transplantation.
2. Participate in the perioperative management of immunosuppressive drug therapy, including monitoring drug levels and treating potential toxicity.
3. Diagnose acute and chronic organ rejection using clinical signs and symptoms as well as serum chemistries and radiologic studies.
4. Recognize and manage postoperative surgical complications, including wound infection, anastomotic stenoses and leaks, and lymphocele formation in immunosuppressed patients.

5. Participate in the evaluation of potential candidates for living-related and cadaveric organ transplantation, including:
   a. clinical suitability
   b. strength of social support
   c. expected graft and patient survival

6. Participate in the evaluation of patients suspected of organ rejection to include:
   a. laboratory and radiologic testing
   b. administration of immunosuppressive agents
   c. following patients for potential acute and chronic side effects

**Medical Knowledge: R4**

**Kidney Transplantation**
1. Understand the organ procurement operation and methods of organ preservation.
2. Understand methods of kidney preparation including differences with the right and left kidneys.
3. Understand methods of the organ transplant operation and differences in placement of kidney to right or left iliac fossa.
4. Understand issues regarding stents and drains in kidney transplantation.

**Liver Transplantation**
1. Understand the organ procurement operation and methods of organ preservation.
2. Understand principles of graft preparation and arterial anatomical variations.
3. Understand and participate in the recipient hepatectomy and allograft implantation; understand differences in approach and variations including use of veno-venous bypass.

**Pancreas Transplantation**
1. Understand the organ procurement operation and methods of organ preservation.
2. Understand principles of graft preparation and arterial anatomical variations.
3. Understand the difference in organ placement for transplantation and with addressing exocrine drainage.
4. Understand the main issues regarding postoperative care of these patients.

**Small Intestine**
1. Understand the organ procurement operation and methods of organ preservation.
2. Understand principles of graft preparation and arterial anatomical variations.
3. Understand the main issues regarding postoperative care of these patients.

**General Issues in Transplantation**
1. Understand preoperative assessment and optimization.
2. Understand indications for solid organ transplantation.
3. Understand contraindications to transplantation.
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4. Understand issues in the assessment of donor suitability.
5. Understand general principles of organ preservation.
6. Understand the concept of and impact of cold / warm ischemia.
1. Define brain death and understand the ethical issues surrounding brain dead donors.
2. Define donation after cardiac death.
3. Understand HLA matching and organ outcomes in kidney transplantation.
4. Demonstrate a greater understanding of the mechanisms of pharmacologic immunosuppression used with organ transplantation, side effects, and indications for use of various agents.

Professionalism:

1. Work within a multidisciplinary critical care team.
2. Participate in weekly multidisciplinary rounds
3. Demonstrate respect, compassion, integrity, and kindness in relationships with patients, families, and colleagues.
4. Demonstrate sensitivity and responsiveness to gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors and disabilities
5. Understand concepts of patient confidentiality and informed consent.
6. Develop the ability to formulate constructive feedback in response to problems encountered in the workplace.

Systems-based Practice:

1. Understand and utilize indications for ward and ICU admission.
2. Understand and utilize criteria for transfer into and out of the ICU and hospital discharge.
3. Understand concepts related to transfer of patients from outside institutions.
4. Understand concepts of cost-efficiency in the ICU and ward.
5. Understand limitations of care and concepts of futility.

Practice-based Learning and Improvement:

1. Utilize the medical literature to hone practice indications and guidelines and critically evaluate current management.
2. Understand modern concepts of evidence grading and outcome assessment.

Interpersonal and Communication Skills:

1. Interact effectively and professionally with patients, families, physicians, nurses, and other members of the health-care team.
2. Practice compassionate end-of-life care
3. Provide effective consultation to other physicians and health care professionals
4. Maintain comprehensive, timely, and legible medical records

GSL 8/2006