HAP 572  GENERAL SURGERY

The purpose of the surgical rotation is to provide the student with practical clinical experience in the evaluation and management of surgical patients. Students will gain skills in obtaining focused patient histories, physical diagnosis and medical decision making through exposure to a broad base of “undifferentiated” patients and the wide variety of personal and social issues that influence patient care. This clerkship is designed to augment, strengthen and refine the student's skills by teaching the indications, limitations and methodology of diagnostic procedures and therapeutic regimes. Emphasis will be placed on the surgical problems commonly encountered in primary care settings. Finally, the clerkship is intended to teach the student to respect and appreciate the contributions of other health professionals in the overall delivery of health care.

I. INSTRUCTIONAL OBJECTIVES

Upon completion of the Surgery rotation, based on supervised clinical practice, utilization of appropriate reading or reference materials, attendance at case conferences, grand rounds, morning reports and rounds, and sessions with program faculty coordinating the clerkships the student will broaden and reinforce medical skills and knowledge pertaining to each of the instructional objectives below, as they relate to signs, symptoms, differential diagnosis and management of clinical problems in the problem list. The student must seek appropriate preceptor supervision for all the tasks listed below, particularly those related to management. At the end of the rotation the student should be able to:

1. Demonstrate knowledge of the etiology, epidemiology, pathophysiology, anatomy, prognosis and complications for each of the diagnoses listed.

2. Obtain a detailed surgical history, perform a thorough physical examination, recognize concomitant medical disorders, and record the information in a problem-oriented manner, if applicable.

3. Perform an appropriate admission history and physical on patients with common surgical problems, with specific focus on those factors that may contribute to surgical diseases, surgical risk, and postoperative complications.

4. Perform the directed history and physical in the outpatient setting for initial evaluation of patients and for routine post-surgical follow-up.

5. Document pre-op, brief operative, and post-op notes, as well as surgical progress notes in the proper format.

6. Write routine pre-op and post-op orders, countersigned by the supervising physician.
7. Assess common surgical disorders and know the associated clinical manifestations, the pathophysiology, treatment, and complications related to these conditions.

8. Assist in the performance of surgical procedures in the operating room, on the floor, and in the outpatient clinic.

9. Identify the indications for appropriate diagnostic procedures and interpret the results of diagnostic tests and procedures.

10. Identify indications for conservative vs. operative management of patients presenting with common surgical problems.

11. Perform ancillary diagnostic procedures necessary for management of patients (such as blood gases, venipunctures, CVPs [central venous pressure], etc.)

12. Recognize emergent vs. non-emergent disorders and be able to maintain appropriate supportive treatment.

13. Manage uncomplicated pre- and postsurgical cases with physician consultation and supervision.

14. Recognize the safety hazards associated with the operating room suite and demonstrate appropriate behavior at all times.

15. Know the appropriate operating room attire, conduct, and protocol.

16. Practice aseptic technique utilizing:
   a. surgical scrub
   b. gowning and gloving
   c. prepping the patient
   d. proper draping of the patient
   e. proper application of wound dressings

17. Perform as first or second surgical assistant for patients the student has admitted and is following on a daily basis.

18. Provide patient education and/or preventive counseling.

19. Discuss the general principles of preoperative and postoperative evaluation and care of patients with important surgical problems to include:
   a. recognition of signs and symptoms of important surgical problems and their complications.
   b. utilization of various diagnostic tests at the appropriate time and in the proper sequence.
   c. management of fluid and electrolyte therapy, including selection of solution, calculating needs, monitoring.
   d. initiating and maintaining surgical nutrition, including progression and restriction of diet, enteral vs. parenteral nutrition, tube and catheter
placement, use, and monitoring.
e. avoiding, recognizing, and managing common surgical infections.
f. evaluation and management of surgical wounds, incorporating sound principles of wound healing and wound care.
g. selection, proper use, and management of catheters, tubes and drains.
h. utilization of medications commonly prescribed to surgical patients, including antibiotics, analgesics, anesthetics, antiemetics, antacids, H₂ antagonists, laxatives, cathartics, etc. The student should be able to modify each of these so as to aid the patient's progress towards hospital discharge and outpatient management.
i. management of medical problems in the surgical patient, including modification of existing drug regimens (i.e. diuretics, beta blockers, other antihypertensive, insulin/oral hypoglycemics, steroids, etc.).
j. appropriate restriction and progression of patient mobility.

20. Demonstrate competence as a surgical assistant by:
a. recognizing the names, uses, and handling of common surgical instruments.
b. discussing the basic steps involved in common surgical procedures in which they will be involved.
c. identifying the composition and use of various suture materials.
d. Compare and contrast common surgical stitches, ties, and knots.
e. Perform/assist in minor surgical procedures in the clinic and emergency department (ED) setting.
II. PROBLEM LIST
The student will demonstrate the knowledge and skills described above pertaining to the following diagnoses:

<table>
<thead>
<tr>
<th>General Surgery</th>
<th>Esophagus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin and soft tissues</td>
<td>Cancer</td>
</tr>
<tr>
<td>• Burns</td>
<td>• Varices</td>
</tr>
<tr>
<td>• Cellulitis/Abcess</td>
<td>• Ulcer</td>
</tr>
<tr>
<td>• Hidradenitis</td>
<td>• Mallory-Weiss tear</td>
</tr>
<tr>
<td>• Melanoma/Basal Cell Carcinoma</td>
<td>• Dysphagia</td>
</tr>
<tr>
<td>Breast</td>
<td>Colon, Rectum, Anus</td>
</tr>
<tr>
<td>• Cancer</td>
<td>• Anal fissure/fistula</td>
</tr>
<tr>
<td>• Benign lesions</td>
<td>• Angiodysplasia</td>
</tr>
<tr>
<td>• Infection</td>
<td>• Cancer</td>
</tr>
<tr>
<td>Blunt and penetrating trauma</td>
<td>• Diverticular disease</td>
</tr>
<tr>
<td>Head and Neck tumors</td>
<td>• Hemorrhoids</td>
</tr>
<tr>
<td>Abdomen (General)</td>
<td>• Intussusception</td>
</tr>
<tr>
<td>• Gastrointestinal bleeding</td>
<td>• Pilonidal cyst</td>
</tr>
<tr>
<td>• Acute abdomen</td>
<td>• Obstruction</td>
</tr>
<tr>
<td>• Hernia</td>
<td>• Ulcerative colitis</td>
</tr>
<tr>
<td>• Appendicitis</td>
<td>• Volvulus</td>
</tr>
<tr>
<td>Stomach</td>
<td></td>
</tr>
<tr>
<td>• Ulcer</td>
<td></td>
</tr>
<tr>
<td>• Carcinoma</td>
<td></td>
</tr>
<tr>
<td>• Gastritis</td>
<td></td>
</tr>
<tr>
<td>• Outlet obstruction</td>
<td></td>
</tr>
<tr>
<td>Small Bowel</td>
<td></td>
</tr>
<tr>
<td>• Obstruction</td>
<td></td>
</tr>
<tr>
<td>• Crohn’s Disease</td>
<td></td>
</tr>
<tr>
<td>Liver, biliary tract, pancreas, spleen</td>
<td>Portal hypertension</td>
</tr>
<tr>
<td>• Portal hypertension</td>
<td>• Cholelithiasis/cystitis</td>
</tr>
<tr>
<td>• Cholangitis</td>
<td>• Common bile duct stone</td>
</tr>
<tr>
<td>• Common bile duct stone</td>
<td>• Pancreatitis</td>
</tr>
<tr>
<td>• Pancreatic cancer</td>
<td>• Pancreatitis</td>
</tr>
</tbody>
</table>

**Vascular Surgery**
- Aortic aneurysm
- Carotid arterial disease
- Peripheral vascular disease
  - Varicose veins, venous stasis, DVT
  - Thrombophlebitis/lymphangitis
  - Arterial insufficiency, occlusion

**Urology**
- Renal stones and tumors
- Bladder tumors
- BPH
- Prostatitis
- Prostatic cancer
- Testicular torsion/tumors
- Vasectomy
III. PROFESSIONAL GROWTH

The student’s attitudes and behavior that contribute to professional growth will be monitored by core PA faculty and clinical preceptors throughout the clerkship. The student will demonstrate professionalism by:

1. displaying a high level of motivation and interest
2. recognizing personal strengths, and limitations in knowledge and skill, and actively seeking help and advice from preceptors when needed
3. identifying areas for improvement and implementing strategies to enhance knowledge, skills and attitudes
4. eliciting and acknowledging feedback, and then modifying behavior accordingly
5. seeking and maintaining competence by reading and utilizing principles of evidence based medicine
6. providing compassionate care to all patients regardless of the patient’s diagnosis, prognosis, age, gender, race, sexual orientation, ethnicity, religious, cultural or health-related beliefs, citizenship or socioeconomic class
7. forming and maintaining positive interpersonal relationships with patients, peers, staff and supervisors
8. maintaining appropriate boundaries in relationships with patients, peers, staff and supervisors
9. being considerate and helpful to all members of the health care team; collaborating appropriately and respecting the roles and professional expertise of all health care professionals
10. recognizing and reporting unprofessional behavior
11. maintaining a calm and sensible manner in stressful and/or emergency situations
12. showing respect for patients privacy by maintaining appropriate confidentiality of the patient’s record
13. being punctual, and displaying appropriate dress and grooming
14. attending to one’s own well being
15. adhering to the American Academy of Physician Assistant (AAPA) Code of Ethics
IV. STUDENT EVALUATION

- Clinical site supervisor evaluation ................................................................. 50%
- Written clinical examination ........................................................................ 15%
- Program faculty grade ................................................................................ 5%
  (H&Ps, patient presentations, professional behavior)
- Clinical skills practicum (CSP) ................................................................. 10%
- Appropriate utilization of Cbase ................................................................. 5%
- EMO exam ................................................................................................. 10%
- HPI ........................................................................................................... 5%

Failure to hand in or present assignments on time or any other unprofessional behavior will result in a lowering of the grade for the rotation.

If a student earns a grade below a “C” for the Surgery Clerkship, he/she will be placed on academic probation and required to repeat the clerkship. This will extend the length of time required for completion of the clinical year.

Failure to earn a grade of C or better on the repeated Surgery Clerkship will result in a recommendation to the Dean for termination from the program.

Americans with Disabilities Act:
If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

Academic Integrity:
Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person’s work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/

Critical Incident Management:
Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students’ ability to learn. Faculty in the HSC
Schools and the School of Medicine are required to follow their school-specific procedures.