Chapter 14

Surgery Clerkship

Introduction

The required course in Surgery at Robert Wood Johnson Medical School, Camden and New Brunswick campuses, consists of an eight-week clerkship in the third year. Overall, the clerkship is designed to provide basic didactic and practical experience in the diagnosis, evaluation and treatment of patients with disorders that may require treatment by a surgeon.

In this regard, we consider it vital to impart a comprehensive understanding to the art and science of the practice of surgery. Six domains of competence have been defined in surgery:

Medical Knowledge: This refers to both established and emerging facts and concepts in biomedical, clinical, and cognate sciences, and the application of knowledge to patient care.

Patient Care: Care should be compassionate, appropriate, and effective for the treatment of health problems and promotion of health.

Interpersonal & Communication Skills: These are essential for effective information exchange and teaming with patients, their families, and other health professionals.

Professionalism: This will be demonstrated by a commitment to professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

Practice-Based Learning: This involves investigation and evaluation of one's own patient care, appraisal and assimilation of scientific evidence, and improvement in patient care.

- Systems-based Practice: This is the awareness of and responsiveness to the entire system of health care, and the ability to effectively call on system resources to provide optimal care.

The course in Surgery is an ongoing experiment. The medical school is our laboratory and each student is a vital participant. We measure, test, evaluate, and assay progress and impressions. A little of that goes into grading, all of it is used as feedback for the faculty. If there is something that might help us do a better job, please let us know. We may not agree right away, but we will listen carefully.

Course Description

Rotation Overview:

The clerkship spans eight weeks. Students will complete four weeks on the general surgery service. The remaining four weeks consists of two-week electives chosen from a list of available opportunities. These may include:

- Anesthesia
- Cardiothoracic Surgery
- Neurosurgery
- Ophthalmology
- Orthopaedic Surgery
- Pediatric Surgery
- Plastic Surgery
A student may elect to spend all four weeks of elective time on a single subspecialty service. A list of index cases with which the student should have clinical experience will be provided. See the Table of Required Surgical Conditions. Attendance at clinical rotations is mandatory. Unexcused absences may result in a grade of Fail or Conditional Pass.

Faculty Preceptor and Tutor:

Dr. Alexander will serve as the faculty preceptor who will oversee the student's activities throughout the eight-week clerkship. For each specific rotation the student will be assigned a faculty tutor who will be the student's guide for that portion of the clerkship. The preceptor will facilitate surgical education throughout the clerkship to assure an adequate breadth and depth of clinical experience. The tutor will be the student's primary contact for day-to-day clinical activities. The preceptor and tutor will guide the student in constructing a daily schedule and discuss the student's current cases. The faculty will assist in the choice and preparation of the student's required case presentations and provide frequent feedback to the student about his/her progress in meeting the goals of the clerkship.

Preceptor Responsibilities Include:

Coordinate student participation throughout the eight-week clerkship to assure a breadth of clinical exposure.

Oversee the student's patient care activities (review written H&P's, discuss patient management of the student's assigned patients, etc.)

Conduct weekly clinical sessions with the group of students, possibly as teaching rounds.

- Individual student meetings to review clinical activity (student log) and overall progress (provide feedback).

The students will participate in the resident services as appropriate and available. At a level commensurate with their experience and abilities, students will be able to assist in direct patient care. Students will participate in resident service rounds as appropriate to the educational goals of the clerkship. Students are encouraged to see and participate in the surgical management of cases even when they are being managed by an attending other than their tutor or preceptor.

When reasonable, they may also cross over to other teams or services. Participation in an index case should be arranged by contacting the appropriate resident on the team concerned and clearing it with the tutor.

The student should meet with their tutor on the first or second day of each rotation to establish learning objectives, determine the weekly meeting times (group and individual), and establish outpatient and operating room commitments. During the weekly individual meetings, the tutor will review and critique the student's written H&P, and discuss the student's log.

The tutor will have primary responsibility for grading the students. (See Final Clerkship Grades). Students are encouraged to elicit specific feedback about their performance from their tutor and preceptor.

Weekly Written History and Physical:

Each week (except for weeks 1 & 8), the student is required to complete at least one H & P, for a total of 6 per rotation. The H & P should be actually performed by the student, written up, and submitted to
his/her preceptor. The format for the H & P is a focused history and physical examination, a
differential diagnosis, a brief discussion of the pathophysiology of the case, and a treatment plan with
a rationale for the treatments selected. The tutor or another faculty member may review the H & P. It
is the student’s responsibility to present the previously reviewed H & P to their preceptor for inclusion
in the evaluation packet.

**Weekly Case-Based Didactic Sessions:**

A case-based framework is used to present didactic information. The topics for presentation are
derived from a national consensus on competencies that should be mastered by students during their
Surgical Clerkship. The 4th Edition of the Manual of Surgical Objectives will be the basis for all didactic
sessions, including the teaching cases. The emphasis of the didactic session is to be on the discussion
of the clinical case(s). Each session is intended to address clinical reasoning that crosses traditional
discipline lines and focuses on developing a differential diagnosis and treatment plan. Student
participation is to be active discussion, not solely passive attention to lectures. The case-based
sessions will be facilitated by faculty and will cover essential information that is assessed on the final
examinations. There may be assigned readings that students are expected to complete prior to the
case-based sessions. Student attendance and participation during the case-based discussions is
required for successful completion of the clerkship.

**Case Presentations:**

Each student will give two formal presentations to his or her peers during the clerkship. Each will take
the form of a case presentation of a patient the student has had during each of two services (one from
the general surgery and one from a subspecialty service). The focus of a presentation may be on the
pre-operative evaluation and management (indications for surgery, diagnosis and patient
preparation), the operative techniques or the post-operative management (resuscitation, recovery and
rehabilitation). The focus of the case will be used as the basis of a critically appraised topic in an
evidence-based medicine discussion of this aspect of the patient’s care. Case presentations should
contribute to the students' basic knowledge of surgical disease and patient management, while
emphasizing the aspect of the case that was intriguing to the student presenting.

The student will be expected to cover his or her presentation in about 20 minutes. The case should be
presented in about ten minutes including a review and explanation of X-ray and other imaging studies.
Ten minutes should then be allotted to review and discuss the relevant literature in an evidence-based
manner. The final ten minutes will be devoted to questions and answers, and any comments by the
faculty present. Each of a student's two presentations will be graded by the faculty member(s) present
and will be graded on a pass/fail basis.

**Student Logs:**

Students will keep a log of their activities on the Clerkship. The log is a database available on the web
of this log is both to allow students to document and track their individual activities and
accomplishments on the Clerkship as well as to allow the Department to monitor the collective
effectiveness of various components of the course. While any and all of the meaningful experiences
that a student experiences during the course are appropriate to enter into the log, the log is also the
place to document exposure to the essential breadth of clinical cases that are REQUIRED (see: Table
of Required Cases).

**Selection of Service Assignment:**

Students will be assigned to the services once all students have submitted their preferences. If it
becomes necessary students will be randomly chosen for his or her choice of specialty or subspecialty.
The next chosen will get his or her choice until spots are used up at which time second, third, or
fourth choices will be used.
OSCE's (Objective Structured Clinical Examination):

The students will complete OSCE's to assess their overall clinical reasoning and discrete, focused clinical skills. The final OSCE will comprise 20% of the final grade.

On Call:

On-call experiences are designated by the faculty of the service to which you are assigned. Students should be sure to understand the call schedule for the service on the first day. However, within the parameters set by the faculty, students are encouraged to establish their own call schedule as a group effort. On General Surgery and Vascular Surgery, students are expected to be on call six times during the six weeks. Not more than one student on general/vascular surgery should be on call on any particular evening. This requires that all students assigned to the general and vascular surgery services coordinate their call schedules. A copy of the students call schedule should be given to the faculty preceptor, the chief resident, and the departmental education office by the end of the second day on service. This call schedule should include the students name, the dates they will be on call, and the student's beeper numbers.

Call is to be taken in-house and to begin with evening sign-out rounds and to end after morning sign-out rounds. Students must contact the senior surgical resident on call to determine time and place to report.

M-3 Reading/Learning Activities

Department of Surgery Grand Rounds:

Grand Rounds are held every Tuesday morning from 7:00 to 8:00 A.M. in the second floor classroom of the E&R Building. Topics are posted by the elevators on the first floor of the hospital. Students will receive monthly schedules. For further information call (856) 963-3985.

Breast Conference:

A multidisciplinary forum for the presentation of patients with complex problems in the management of breast cancer. Medical Oncology, Radiation Oncology and Surgery are represented. The meeting is held in the Radiation Conference Room B in the Kelemen Building basement every Tuesday from 12:00 noon to 1:00 P.M. For further information call (856) 968-7355.

Colorectal Conference:

This is a teaching and patient-management conference focusing on patients with interesting, difficult or unusual colo-rectal conditions. Surgery and Gastroenterology are represented. The meeting is held in the Radiation Oncology Conference Room every second and fourth Monday from 12:00 noon to 1:00 P.M. For further information call (856) 342-2584.

Textbooks:

The recommended texts for the course include Learning Surgery, Stephen Lowry Ed, the Manual of Surgical Objectives from the Association for Surgical Education and Current Surgical Diagnosis and Treatment, G. Doherty (ed). In addition, copies of Surgery: Basic Science and Clinical Evidence have been obtained by the department to be loaned to each student during the course of the third year clinical rotation. The book should be obtained from Lee Rayser, 3 Cooper Plaza, suite 411, at the beginning of the rotation and returned by the time of the final examination. Each student is responsible for the care of the book. Although normal wear and tear is expected, abuse to the book will not be tolerated and will result in the student being required to purchase the book at full price ($175). It follows that highlighting, underlining, or otherwise marking or defacing the books is not acceptable. These books are loaned to you to help you during the course and must be in equally good condition when you return them so that they will be available for your colleagues on the next rotation.
Also enclosed is a list of secondary reference texts. These are available in the library and/or the faculty offices. While these contain material in far greater depth than you need to know for the course, you may find them helpful if particular questions arise with a patient you have seen.

**Teaching Sessions:**

All formal teaching sessions will assume a case-based format. The student must review the subject matter to be discussed prior to each session and be prepared to actively participate in the session itself. If the students fail to do so, these experiences will be of little value. Each individual student as well as the group as a whole will be short-changed as a result.

Each session is intended to address clinical reasoning that crosses divisional lines and focuses on developing a differential diagnosis and treatment plan. The case-based sessions will be facilitated by faculty and will cover essential information that is assessed on the final examinations. There may be assigned readings that students are expected to complete prior to the case-based sessions.

**Links:**

The UMD and Coriell Research Library has compiled a large list of surgery online resources for student and faculty use.

**M-3 Supplemental Materials**

**Operating Room:**

An orientation to the Operating Room will be held in the O.R. on the first afternoon of the course. It will be conducted by Lorraine Bailey, RN./Joan Flood, RN. Attendance is mandatory for anyone who has not previously scrubbed in the Cooper University Hospital Operating Rooms.

**Blood/Body Fluids Exposure:**

There is obviously a risk for exposure to blood and/or bodily fluids during the surgery rotation. A significant exposure would include splashing of blood or bodily fluids onto a mucosal surface (in the mouth or conjunctival sac) or onto an open skin wound. Similarly, any contaminated object penetrating your skin (e.g. scalpel blade or needle) would also be a significant exposure. Blood and/or body fluids splashing on clothes or intact skin does not constitute a significant exposure since there is no identifiable risk from these occurrences.

Should a significant exposure occur, the Dean's Office has requested that you do the following:

- Immediately wash the affected area with soap and water. Cover the area with a bandage or dressing if possible.
- Immediately notify the supervising resident and/of faculty member and Academic & Student Affairs (Dr. Risimini, 757-7856).
- Immediately contact the Student Health Service in the Department of Medicine at (856) 342-2434 or 2439 between the hours of 8 A.M. and 4 P.M. Monday thru Friday or report directly to the Emergency Department at Cooper University Hospital at all other times.

Any student receiving immediate care in the emergency department should report to the student health service on the next regularly scheduled work day for follow-up care.

**Scrubs:**

Scrub suits or "greens" are available for your use during the rotation. They are mandatory in the Operating Room. Most students also find them convenient and comfortable when on call. They may be obtained from the hospital laundry. However, they are hospital property and are not to be taken home.
Lockers:

There is a shortage of lockers in the Operating Room. Many faculty and residents do not have their own lockers, but are forced to share their lockers with others. Nonetheless, there are usually one or two lockers available in the locker rooms that are unclaimed and may be used by students. However, it is recommended that no attempt be made to lock the lockers and that consequently, no valuables should be kept in them.

Beeppers:

Please let your tutor, the Department of Surgery Education Office and the surgical residents know your beeper numbers.

On-Call Rooms:

Sleeping rooms are available for students on call. Keys to the rooms may be obtained from the guard at the security desk by the parkade entrance of the hospital. It is recommended that you do not turn off your beeper even though there are phones in the on-call rooms. However, you should let the operators know the phone number of the on-call room to minimize the chance that you may miss a call. (Also, the operators will sometimes be willing to give you a wake-up call if you are fortunate enough to be able to get to sleep at night.)

Miscellaneous:

Lee Rayser is the Clerkship Coordinator for the Department of Surgery. You may reach her at (856) 963-3985. Dr. James Alexander is the Director of Undergraduate Education and is available by appointment or on the fly. His office may be reached at x 2151. Dr. Lisa Reid is the Deputy Director of Undergraduate Education. She may be reached through her office at x7355.

M-3 Schedule/Overview of Eight Week Clerkship

**Monday**: 6:30 AM to 6:00 PM - First Monday of the Rotation
Introduction/Orientation, Three Cooper Plaza, Suite 411 Conference Room

4 – 6 PM – Didactic Series – Suite 411 Conf Rm – as scheduled

**Tuesday**: 7:00 to 8:00 AM
Department of Surgery Grand Round Series, 2nd Floor Classroom, E&R Building

4 – 6 PM - Didactic Series – Suite 411 Conf Rm – as scheduled

**Wednesday**: 7:00 to 9:00 AM - 6th Wednesday of the Clerkship
OSCE Exam, Suite 403 of Three Cooper Plaza

Noon – 2 PM – Student Case Presentations

**Thursday**
7 – 9 AM - Didactic Series – Suite 411 Conf Rm – as scheduled

**Friday**: 7:45 to 10:00 AM - 8th Friday of the Clerkship
NBME Exam (location TBA)

11:30 AM – Departmental Feedback Luncheon w/Drs. Alexander/Reid/Chief of Surgery
2009-2010 ACADEMIC YEAR – Detailed Schedules
Class of 2011

Clerkship #1 – July 6 to August 28, 2009
Clerkship #2 – August 31 to October 23, 2009
Clerkship #3 - October 26 to December 18, 2009
Clerkship #4 - January 4 to February 26, 2010
Clerkship #5 - March 1 – April 23, 2010
Clerkship #6 - April 26 – June 18, 2010

If you require additional information please contact James B. Alexander, M.D.