SURGERY

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Lecturers L. Acton, M. Daley Bell, B. Fichandler, A. Keltz, H. Warner

ELECTIVES

Burn Surgery Elective (Bridgeport Hospital) This rotation provides intensive exposure to the care of the acutely burned patient: surgical and nonsurgical care, critical care, and outpatient wound care. Large burn injuries evoke the most severe critical illness known to medicine. Patients with such injuries are unstable for prolonged periods of time and require responsive and attentive critical care. The student participates in all aspects of care, including procedures performed in the burn intensive care unit as well as in the operating room. Each student is assigned two to three patients, and the student is expected to write notes, attend operative procedures, and follow up on studies and consultants for their patients. Assessment of burn size and depth as well as need for operative intervention is emphasized. Operative therapy for acute burns includes excisional debridement and skin grafting, but there are multiple choices to be made in providing optimal care to a particular patient. Burn scar revision is also a critical portion of the patient's journey and is also undertaken on a regular basis.

Cardiac Surgery Elective This rotation provides students with an intensive exposure to preoperative and postoperative management of adult and pediatric cardiac surgical patients and to intraoperative conduct of surgical procedures, with active participation in the operating room and in regular conferences. Students attend regular seminars covering major areas of cardiac surgery with members of the faculty and may be required to present a seminar on a subject in cardiac surgery to faculty and resident staff.

General Surgery Elective (SRC) Students become an integral part of the resident team, supervised by the chief resident and attending physicians on the general surgery service. During this rotation, students are fully integrated into the service and are expected to participate in all teaching conferences, grand rounds, and clinics, and attend core-curriculum conference two hours per week. Under the supervision of the chief resident and faculty, students participate in the management of general surgical in-patients, preoperative evaluations, and outpatient clinics. Our goal is to provide an educational experience that will be of value to the student's eventual practice, regardless of specialty.

Otolaryngology Elective This clinical experience is similar to the Otolaryngology Subinternship but is only two weeks in duration and allows more flexibility to the student to participate in operations and clinics of their specific interest. It includes

experience in the operating room, wards, outpatient clinics, conferences, didactics, and tumor board. The rotation is divided into one-week blocks, including the Head and Neck Service (H&N Cancer/Reconstructive Surgery, Laryngology) and the ENT Specialty Service (Neurotology, Pediatrics, Sinus/Skull Base, Facial Plastics, General). At the end of the rotation, the students may (but are not required to) give a seven-minute presentation on a topic of their choice at the ENT grand rounds. By the end of the rotation, students should become comfortable performing a thorough but efficient head and neck examination, interpreting diagnostic tests and procedures that can be useful in all medical and surgical subspecialties, and improve their suturing skills.

Surgical Critical Care Elective (SICU/SRC) In this two-week rotation, the surgical intensive care unit exposes the senior medical student to the day-to-day and minute-to-minute management of the critically ill surgical patient. The breadth of surgical disease, spanning all aspects of surgery, allows the student to understand the management of respiratory, cardiovascular, gastrointestinal, and renal failure. Students are exposed to advanced techniques in ventilatory management and state-of-the-art sepsis management.

Surgical Critical Care Elective (YNHH) In this four-week rotation, the surgical intensive care unit exposes the senior medical student to the day-to-day and minute-to-minute management of the critically ill surgical patient. The breadth of surgical disease, spanning all aspects of surgery, allows the student to understand the management of respiratory, cardiovascular, gastrointestinal, and renal failure. Advanced techniques in ventilatory management and state-of-the-art sepsis management are used.

Thoracic Surgery Elective Experience the rewarding and meaningful rotation that is the General Thoracic Surgery Elective! There is a lot of teaching in the operating room, on the floors, and in the clinics when you are with us. In return, the student is expected to be a valuable contributing team member during daily rounds, in the operating room, in the outpatient clinics and at conferences. The majority of the patients under the care of the thoracic surgery service include patients with lung, esophageal, and mediastinal malignancies and infections, and many present both diagnostic and therapeutic challenges. In addition to the enriching interactions with the thoracic oncology patients, students have the opportunity to understand the multidisciplinary approach that is undertaken in the management of these complex patients. If the students are interested, clinical research projects and papers can also be pursued while on the service.

SUBINTERNSHIPS

Bariatric Surgery Subinternship (SRC) This subinternship allows the student to learn about the multidisciplinary approach to bariatric surgery, its indications, types of bariatric surgery, post-operative care of these patients, and evaluation and management of complications thereof. During this subinternship, the student gains a familiarity with the anatomy and pathophysiology of conditions addressed by and related to bariatric surgery. The student also has the opportunity for exposure to nonbariatric cases, with minimally invasive foregut surgeries and hernia repairs. The student learns the principles and applications of laparoscopy. Many cases include upper endoscopy. Students have the opportunity to assist in the care of patients in the hospital ward, the emergency room, the operating room, and clinic. This subinternship takes place

at the Saint Raphael Campus, with a few scheduled cases occurring at the York Street Campus.

Cardiac Surgery Subinternship Intensive exposure to preoperative and postoperative management of adult and pediatric cardiac surgical patients and to intraoperative conduct of surgical procedures, with active participation in the operating room and in regular conferences. Students attend regular seminars covering major areas of cardiac surgery with members of the faculty and may be required to present a seminar on a subject in cardiac surgery to faculty and resident staff.

Colorectal Surgery Subinternship Students learn about the surgical care of colon and anorectal diseases, including infectious, inflammatory, neoplastic, and mechanical pathologic processes. Students assist in the evaluation, management, and care of patients with colorectal and anorectal disease in the hospital ward, emergency room, operating room, and clinic. There is routine use of endoscopy and laparoscopy. Students may also participate in a precepted experience, with increased responsibility for patient care on the hospital ward, acting as the intern for select weekends.

Endocrine Surgery Subinternship This elective exposes the student to in-depth clinical and surgical aspects of endocrine surgery. Special emphasis is placed on the multidisciplinary approach to the endocrine patient, understanding the laboratory and radiologic studies, cytopathology, biochemical analysis, preoperative stabilization of patients, intraoperative decision-making, and postoperative follow-up and outpatient evaluation of patients. Technical skills are emphasized as well for students interested in improving their surgical hands.

Otolaryngology Subinternship This clinical experience is independent of the Otolaryngology rotation and takes place on an individual basis. It includes experience in the operating room, ward, outpatient clinics, conferences, didactics, and tumor board. The rotation is divided into two-week blocks, including the head and neck service (H&N cancer/reconstructive surgery, laryngology) and the ENT specialty service (neurotology, pediatrics, sinus/skull base, facial plastics, general). At the end of the rotation, students are expected to give a seven-minute presentation on a topic of their choice at ENT grand rounds. By the end of the rotation, students should become comfortable performing a thorough but efficient head and neck examination, interpreting diagnostic tests and procedures that can be useful in all medical and surgical subspecialties, and improve their suturing skills.

Pediatric Surgery Subinternship This subinternship provides an in-depth exposure to the broad spectrum of pediatric surgical problems. Specific attention is given to identifying the pediatric patient in crisis, a relevant skill whether or not the student pursues a career in surgery. Objectives include understanding the correction of major congenital anomalies, management of trauma, care of the critically ill child, and management of solid tumors. Experience includes in-depth exposure to the pediatric operating room, training in neonatal and pediatric critical care, and experience in the pediatric surgical outpatient clinic. The student is an integral part of the pediatric surgical team.

Plastic and Reconstructive Surgery Subinternship This subinternship is designed to provide students interested in plastic and reconstructive surgery an opportunity to participate in the evaluation and reconstructive surgery of deformity of congenital,

traumatic, and neoplastic origin. This includes craniofacial surgery, hand surgery/peripheral nerve, and reconstructive microsurgery throughout the body including breast and lower extremity. Students are exposed to patients in the inpatient and outpatient settings as well as the operating room. Experiences are supplemented by didactic conferences each week. Students are expected to provide a short (five to ten minutes) end-of-the-rotation presentation on their topic of interest.

Surgical Critical Care Subinternship (VAMC/SICU) Students are assigned advanced clinical duties in the field of surgical critical care. Students spend time in the Surgical Intensive Care Unit, where they participate in the management of critically ill surgical patients, including general surgical, vascular, urologic, cardiothoracic, and neurosurgical patients. Topics covered include cardiopulmonary resuscitation, airway and ventilator management, fluid management, nutritional support, and the management of sepsis. Students can participate in all invasive procedures in the SICU, including bedside tracheostomy, percutaneous gastrostomy placement, bronchoscopy, and arterial and central venous catheter placement. Students are directly responsible for one to two critical care patients under the direct supervision of the intensive-care attending. Subinterns present on rounds each day and assist in providing family and primary service communication. This rotation is limited to fourth-year students.

Surgical Oncology Subinternship Intensive exposure to surgical aspects of the treatment of cancer in the clinic, hospital, and operating room. The interaction among surgery, medical oncology, and radiation therapy is experienced by following patients receiving multiple forms of therapy.

Thoracic Surgery Subinternship Experience the rewarding and meaningful rotation that is the General Thoracic Surgery Subinternship! There is a lot of teaching in the operating room, on the floors, and in the clinics when you are with us. In return, the subintern is expected to be a valuable contributing team member during daily rounds, in the operating room, in the outpatient clinics and at conferences. The majority of the patients under the care of the thoracic surgery service include patients with lung, esophageal, and mediastinal malignancies and infections, and many present both diagnostic and therapeutic challenges. In addition to the enriching interactions with the thoracic oncology patients, students have the opportunity to understand the multidisciplinary approach that is undertaken in the management of these complex patients. If the subinterns are interested, clinical research projects and papers can also be pursued while on the service.

Transplantation Surgery Subinternship This intensive clinical experience emphasizes the preoperative assessment, intraoperative care, and postoperative management of patients suffering end-stage organ system failure who are cared for by transplantation. Emphasis on the management of immunosuppressive medication regimens and the care of post-transplant problems.

Trauma and Emergency General Surgery Subintership This is a four-week exposure to the urgent surgical care of the critically ill and injured patient including those with penetrating and blunt injuries; surgical emergencies including mesenteric ischemia, bowel perforation, abdominal sepsis, necrotizing soft-tissue infections; and other urgent surgical conditions. Students are exposed to the evaluation and medical and surgical management of patients with traumatic and surgical emergencies in the emergency department, surgical floors, operating rooms, and outpatient clinics; and

they assume supervised primary responsibility for these patients throughout their pre-, intra- and postoperative courses.

Urology Subinternship This flexible program is designed to provide an in-depth exposure to urology specialty areas. Students must have at least six months of prior clinical training. The subintern will be a part of the urologic team and participate actively in the clinic, the OR, and on rounds. The urology subinternship at Yale will provide an in-depth view of the various sub-specialties within urology including uro-oncology, minimally invasive (laparoscopic) urology, endo-urology, neuro-urology, female urology, and pediatric urology. The subinternship is an opportunity for students to showcase their abilities, and their evaluations are based on their clinical performance, knowledge, and professionalism. Participation in the subinternship will not guarantee a residency interview but will be considered as part of a holistic evaluation of the complete application.

Vascular Surgery Subinternship This subinternship is practical experience in the diagnosis and management of vascular disease, including pre- and postoperative care. The scope of the experience includes orientation to the noninvasive vascular diagnostic laboratory, outpatient care in the Yale Vascular Center, and inpatient management (including patients in the operating room, ICU, and the vascular surgery unit).