RCRMC General Surgery (Purple) Goals and Objectives

PGY 3

Goals:

Riverside County Regional Medical Center will provide a learning environment for various gastrointestinal surgical pathology and general surgical issues. Surgical basic science, including fluids and electrolytes, wound healing and nutrition, will be emphasized. Clinically, residents will assess surgical pathology pre-operatively, develop clinical judgment on managing these issues, and learn operative skills to address the problem. Careful postoperative care and follow up will be emphasized. Residents will develop cognitive and technical skills in dealing with complex gastrointestinal pathology.

Objectives:

MEDICAL KNOWLEDGE

Describe the physiological process of normal wound healing, including the healing relationship to: anatomy, microbiology, physiology, immunology, biology, molecular biology and biochemistry

Explain the effect of the following factors on wound healing:
- Nutrition
- Pathologic metabolic states (including diabetes mellitus)
- Hematologic status
- Radiation
- Immune response
- Growth factors
- Super oxide radical formation
- Pharmacologic manipulation
- Infection/sepsis
- Chemotherapeutics
- Trauma
Describe the steps of normal wound healing, including: inflammation, granulation tissue formation, epithelialization, contracture/contraction.

Discuss the pathophysiology of delayed wound healing due to microbial physiology, virulence, and host defenses.

Differentiate between the pathophysiology of thermal, chemical, and electrical burns.

Discuss the principles of aseptic technique in uncomplicated cases related to the following procedures: incision making, wound closures, debridement, dressings, splints, and casts.

Explain the principles of wound care as they relate to: debridement, chronic wounds, traumatic wounds, high-pressure injection injury, burn wounds and medication infiltration.

Discuss potential problems in complicated wound healing, including such challenges as snake, animal, insect, and human bites; electric burns; deep space infections of the hand; penetrating wounds; and radiation.

Define and describe the causes of postoperative wound complications such as:
- Dehiscence
- Evisceration
- Fasciitis and abscess formation

Outline a program of therapy for complex wound problems using the reconstructive ladder.

Describe the microbiology of gangrene and necrotizing fasciitis.

Explain the principles associated with the selection of appropriate incisions applying surgical anatomy to include:
- Blood supply
- Strength
- Lines of tension
- Cosmetic/aesthetics
- Access

Describe the rationale for selection of appropriate wound closure and reconstruction as it relates to wound healing in:
- Primary and delayed primary closure
- Secondary healing
- Skin graft, split and full thickness
- Local flaps
- Regional flaps
• Microvascular flaps
• Composite grafts

Assess the properties and uses of different types of suture material, including those that are absorbable and non-absorbable.

Analyze the therapeutic options for treatment of abnormal or delayed wound healing because of:
• Host resistance
• Radiation
• Infection
• Ischemia
• Diabetes mellitus

Discuss treatment choices for the following wound healing problems:
• Dehiscence
• Hernia
• Infection

Identify the resources needed to assist with wound healing outside the hospital and outline methods for resource acquisition to include home health care and equipment rental.

Describe the use of pressure relief devices and beds to prevent pressure ulcerations.

Differentiate between fetal wound healing and adult wound healing.

Explain the operative approaches (incisions) for each of the following, including laparoscopic:
• a Abdominal cavity: liver/biliary tract, spleen, small bowel, pelvis
• b. Retroperitoneal organs: kidneys, adrenal glands, abdominal aorta
• c. Thoracoabdominal aorta
• d. Pericardial sac

Describe the use and method of placement of retention sutures.

Explain the rationale for and mechanics of techniques of peritoneal dialysis in renal failure and in management of peritoneal infections or pancreatitis.

Assess the treatment of secondary peritoneal infections due to peritoneal dialysis catheters.

Describe the pathophysiology and treatment of ascites in:
• Malignancy
• Hepatic disease: cirrhosis, Budd Chiari Syndrome
• Chylous leak
• Pancreatic leak
• Cardiac disease
• Renal disease

Explain the indications for use and complications of peritoneo-venous shunts.

Describe the etiology, manifestations, and treatment of:
• Desmoid tumors
• Rectus sheath hematoma
• Retroperitoneal fibrosis

Describe the more common retroperitoneal tumors. (What is their clinical presentation, treatment and prognosis?)

**PATIENT CARE**

Provide basic care to wounds from abrasions and small lacerations, including acute debridement, closure, and dressing placement.

Provide care for complex traumatic injuries considering:
• Management of hemorrhage
• Acute pain control
• When to explore operatively
• Debridement
• Acute closure or coverage
• Secondary reconstruction

Evaluate the progress of wound healing.

Apply all types of dressings and casts.

Make and close common incisions in the outpatient clinic, outpatient emergency department, and in the operating room.

Remove casts and complex dressings.

Assess thermal and non-thermal burns and initiate treatment.

Debride and care for wounds of low to intermediate complexity, including traumatic injuries.

Apply all types of complex dressings, including body casts.

Make and close incisions of low to intermediate complexity.
Debride complex wounds and provide postdebridement care of such wounds.

Manage wounds of low to intermediate complexity, and alter therapy as indicated.

Perform complex procedures for the closure of difficult wounds, including various local and regional skin flaps and grafts.

Manage the care of various complex wound complications such as dehiscence, wound infections, and incisional hernias.

Analyze the use and need for complex reconstructive flaps and grafts; (e.g., application of the "reconstructive ladder").

Open and close abdominal incisions of all varieties.

Treat wound complications such as infections and evisceration. Use retention sutures appropriately.

Assist with thoracoabdominal and retroperitoneal exposures for access to kidneys, aorta, iliac arteries.

Perform laparotomy for acute abdomen, demonstrating a systematic approach for determination of the etiology of the process and appropriate measures for its management (e.g., acute appendicitis, small bowel obstruction, perforated peptic ulcer [the 5th year resident should be able to guide the more junior resident through the case]).

Perform more complex laparotomies involving diffuse peritonitis in the septic patient (e.g., agangrenous or severely inflamed gallbladder or perforated diverticulitis requiring resection).

Coach a junior resident through the repair of simple hernia (indirect inguinal or umbilical).

Provide appropriate surgical drainage for any intra-abdominal abscess.

Serve as an effective surgical team leader.

**PRACTICE BASED LEARNING AND IMPROVEMENT**

Demonstrate particular familiarity with the scientific information pertinent to their patients’ care.
Be able to evaluate the level of evidence supporting knowledge and venues for acquiring, disseminating and demonstrating this knowledge are individual.

Acquire habits of lifelong learning through both reading and professional activities.

**INTERPERSONAL AND COMMUNICATION SKILLS**

Consistently communicate with patients, families and other health care professionals.
The quality, quantity and attitude of communication are all important, via both verbal and written routes.

Work in a cooperative manner with other health care personnel, being sensitive to their roles and abilities.

Give and receive advice in a manner that is consistent with the harmonious operation of the health care team.

Communicate with patients and their families, explaining recommendations to them in terms each individual can comprehend.

Respect patients’ right to privacy.

Respect the sexual, moral, ethical, or religious characteristics of the patient and family.

Understand the special psychological needs of the patient with complicated wounding healing.

**PROFESSIONALISM**

Maintain highest standards of ethical behavior, with a commitment to continuous, high-quality patient care. The professional behavior extends to all patient care interactions, including patients on Breast Surgery service, and those evaluated as consults.

Demonstrate sensitivity to the diversity of ages, genders, cultures and relationships.

Encompass the individual professional behavior necessary to maintain the function of the hospital and training program, including timely medical documentation, completion of licensing and credentialing requirements, documentation of work-hours, and adherence to the ACGME Duty Hours requirements.
Demonstrate an appreciation of the ethical and legal aspects of endocrine and colorectal surgery

Demonstrate honesty, reliability, and respectfulness in working with patients and colleagues

Demonstrate capacity to undertake research, and awareness of the importance of peer review of protocols, ethical considerations, and the limitations of such endeavors.

Dress neatly and appropriately when working with patients in non-urgent setting

SYSTEMS- BASED PRACTICE

Be able to access the health system resources necessary to practice high-quality, cost-effective patient care. This includes understanding the roles of various specialists and other health care professionals in the care of their patients.

Demonstrate an understanding of how hospital works.

Discuss roles that support services, such as pharmacy, security play in patient care.

Demonstrate understanding of how to order and obtain tests, schedule procedures both elective and emergency.

Request and use consultations appropriately.

Request and review laboratory and radiographic services appropriately.

Work cooperatively with the non-physician caregivers associated with RCMC (physician assistants, nurse coordinators, discharge planners)