



## UNC DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

### BURN SURGERY ROTATION: COMPETENCY-BASED GOALS AND OBJECTIVES

#### MEDICAL KNOWLEDGE

**Goal:** The resident will achieve a detailed knowledge of the evaluation and management of burn patients.

**Objectives:**

1. Discuss the techniques of resuscitation of major burns.
2. Recite the criteria for superficial and deep partial thickness, as well as full-thickness classification of burns.
3. Discuss the three zones of a burn wound.
4. Discuss the properties of split thickness vs. full thickness skin grafts, as meshed and sheet grafts.
5. Discuss the treatment of inhalation injuries.
6. Describe the resuscitation and management of electrical burns.
7. Describe the indications of fasciotomies and escharotomies.
8. List the details regarding the use of skin substitutes, biological dressings, and xenografts in the treatment of the burn patient.
9. Discuss the reconstruction for burn contractures.
10. Recite the use of pressure garments and silicone therapy in the prevention of abnormal scars.
11. Describe the pathology and management of thermal, chemical, and electrical injury and inhalation injury and relationship to mortality, morbidity, and course of patient recovery.
12. Outline the principles of burn shock, immunologic alteration, and bacteriologic pathology of the burn wound.
13. Discuss the epidemiology, prevention, and socioeconomic and psychological impact of burns.
14. Recite the physiologic response to thermal, chemical, and electrical burn injuries, including the micro and macro disruption of normal skin anatomy and physiology.

#### PATIENT CARE

**Goal:** The resident will provide patient care that is compassionate, appropriate, and effective for the treatment of burn patients.

**Objectives:**

1. Evaluate the appearance of the burn wound in relation to its depth, bacteriologic condition, healing potential, and requirement for intervention.
2. Perform burn wound debridement and preparation for skin grafting.
3. Perform split-thickness skin grafts.
4. Perform full-thickness skin grafts.

5. Utilize skin substitutes, biological dressings, and xenografts in the treatment of burn wounds.
6. Utilize splinting and pressure garments to minimize scar formation and post-burn contractures.
7. Perform the surgical treatment of post-burn contractures with releases, z-plasties, and grafting.
8. Participate in the acute resuscitation and care of the burned patient.
9. Treat patients who are the victims of electrical burns.
10. Perform escharotomies and fasciotomies when indicated.

### **PRACTICE BASED LEARNING AND IMPROVEMENT**

**Goal:** The resident will investigate and evaluate his or her own patient care practices, appraise and assimilate scientific evidence, and improve patient care practices.

**Objectives:**

1. Uses information technology to prepare for surgical cases, bringing to the OR the knowledge of current modalities of care and the scientific evidence for that care.
2. Routinely analyzes the effectiveness of own practices in caring for burn patients.
3. Improves own practices in the care of burn patients by integrating appropriately gathered data and feedback
4. Educates medical students and other healthcare professionals in the practices of burn surgery and reconstruction.
5. Functions independently with graduated advancement and appropriate faculty supervision.
6. Uses library sources to perform research and perform literature searches.
7. Understands the principles of clinical research and the application of biostatistics.

### **INTERPERSONAL AND COMMUNICATION SKILLS**

**Goal:** The resident will demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and professional associates.

**Objectives:**

1. Educates patients and families in post-operative and rehabilitative strategies for burn patients.
2. Demonstrates compassion for patients and families afflicted with trauma.
3. Provides adequate counseling and informed consent to patients.
4. Listens to patients and their families.
5. Assimilates data and information provided by other members of the health care team.
6. Charts and records accurate information.

### **SYSTEM BASED PRACTICE**

**Goal:** The resident will demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

**Objectives:**

1. Coordinates all aspects of the rehabilitation of the burn surgery patient.
2. Direct the rehabilitation of burn surgery patients by partnering with the following:
  - a. Physical Therapy
  - b. Occupational Therapy
  - c. PRM Physicians
  - d. social workers

e. nutritionists

3. Demonstrates knowledge of cost-effective burn surgery care.
4. Advocates for burn surgery patients within the health care system.
5. Refers orthopedic patients to the appropriate practitioners and agencies.
6. Facilitates the timely discharge of burn surgery patients.
7. Works with paramedical professionals in the pre-hospital care of trauma patients.

## **PROFESSIONALISM**

**Goal:** The resident will demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

### **Objectives:**

1. Develops a sensitivity of the unique stresses placed on families under care for burn injuries.
2. Exhibits an unselfish regard for the welfare of burn surgery patients.
3. Demonstrates firm adherence to a code of moral and ethical values.
4. Is respectful to burn patients and their families especially in times of trauma and stress to the family unit.
5. Respects and appropriately integrates other members of the burn surgery team.
6. Provides appropriately prompt consultations when requested.
7. Demonstrates sensitivity to the individual patient's profession, life goals, and cultural background as they apply to burn care.
8. Is reliable, punctual, and accountable for own actions in the OR and clinic.
9. Understands the concepts of autonomy, beneficence, nonmaleficence, justice, and respect for life.
10. Maintains patient confidentiality.