

# Dalhousie University Neurosurgery

## Resident Rotation Objectives: ICU

### Medical Expert

#### *KNOWLEDGE*

As a basis for clinical competence the neurosurgical resident must be familiar with and able to describe and discuss:

1. The critical care management issues common to neurosurgical specific patient populations including: Multitrauma, Traumatic Brain Injury, Brain Tumor, Post Craniotomy, Cerebrovascular Disorders including SAH, AVM, ICH, Complex Spinal Disorders.
2. The basic respiratory pathophysiology in critical ill patients including principles of mechanical ventilation
3. The basic cardiovascular pathophysiology in critically ill patients including arrhythmia management and inotropic support.
4. Common gastrointestinal disorders in critically ill patients.
5. Common hematologic disorders in critically ill patients including the principles of blood product transfusions.
6. Common metabolic disorders in critically ill patients
7. Common Renal disorders in critically ill patients.
8. The principles of long term sedation, analgesia and neuromuscular blockade.
9. Understanding of end of life and withdrawal of care principles.
10. Diagnosis and management of potential organ donors

#### *CLINICAL SKILLS*

1. The practiced discipline of obtaining a detailed history and physical exam from a critically ill patient and his / her family and other health care providers.
2. The demonstration of skills in ordering and interpreting appropriate general diagnostic tests for the satisfactory management of the critically ill patient.
3. The provision of ongoing assessment and care throughout a patients stay in the ICU.

#### *TECHNICAL SKILLS*

At the completion of the rotation the trainee must have demonstrated a thorough understanding of the appropriate anatomy and the technical ability to satisfactorily and safely perform the following procedures:

1. Peripheral venous access
2. Central venous access

3. Arterial line placement
4. Airway intubation
5. Nasogastric and orogastric tube placement
6. Intracranial pressure monitor placement
7. Spinal immobilization

### **Communicator**

1. Establish therapeutic relationships with patients and their families.
2. Document appropriate histories, physical examinations and progress notes.
3. Provide appropriate information to patients and provide information to family members that will support their involvement in decision making.
4. Prepare written documentation for referring physicians in a timely concise and collegial manner.

### **Collaborator**

1. Consult effectively with other physicians as well as other health care professionals including nursing, physiotherapy, occupational therapy, dieticians, social workers, and spiritual care.
2. Contribute to interdisciplinary activities as needed.

### **Leader**

1. The trainee must learn to manage their time effectively in order to prioritize clinical activities, learning needs, administrative responsibilities and research endeavours.
2. The trainee should be prepared to provide advice on the efficient use of health resources.

### **Health Advocate**

1. The trainee should be able to use the available resources to assist with patients educational, socioeconomic and psychological requirements.

### **Scholar**

1. Participation in ICU rounds is expected.
2. Demonstrate self directed learning with critical appraisal of relevant literature.
3. Facilitate the learning of patients and their families, colleagues and other health care professionals.

## **Professional**

1. Demonstrate the characteristics of integrity, honesty, compassion, and ethical conduct.
2. Be able to meet deadlines, is punctual, monitors patients according to the needs of their condition and provides appropriate timely follow up.
3. Understands any limitations of knowledge or skill, accepts constructive feedback and corrects deficiencies appropriately.