

## **Chronic Pain Management Rotation**

### **Director: Dajie Wang, MD**

#### Goals

CA 1 residents spend a minimum of 1 month at the Jefferson Pain Center and will:

- 1) Learn to evaluate outpatients with non-cancer and cancer pain
- 2) Learn to perform various invasive procedures requiring fluoroscopic guidance
- 3) Learn to perform routine block procedures, such as lumbar epidural steroid injections, residents will master techniques of the various therapeutic pain treatment measures both in an in-patient and out-patient setting.

#### Objectives

To successfully complete training in chronic pain, the anesthesiology resident should:

##### *A. Patient Care*

1. Discuss the definition of: “pain”
2. Define the basic differences between acute, chronic, and recurrent pain with important affective, cognitive, behavioral, and sensory mechanisms.
3. Obtain an appropriate history and perform a physical examination.
4. Determine the pathogenesis of the patient’s pain.
5. Discuss the technique for placing an epidural catheter with image guidance
6. Describe the procedure for performing a non-fluoroscopic guided epidural steroid injection at the lumbar level.
7. Describe the procedure for performing a stellate ganglion nerve block.
8. Describe the procedure for performing a trigger point injections for myofascial pain conditions.
9. Define the multimodal approach for pain control in cancer patients.

##### *B. Medical Knowledge*

1. Complete reading assignment:
  - a. Barash: Chapter 56
2. Complete the following specific cognitive objectives:
  - a. Define peripheral mechanisms for pain transmission, such as the properties of stimuli that directly or indirectly activate primary afferent nociceptors, the compounds that activate primary afferent nociceptors, and the different physiological types of axons comprising a peripheral cutaneous nerve.
  - b. Define the central mechanism for pain transmission.
  - c. Describe the basic anatomy of the spine (bony and neural structures).
  - d. Describe the pharmacology of NSAIDS and opiates, their indications, and side effects.

- e. Define the indications for the use of antidepressant, anticonvulsant, and muscle relaxant medications.
- f. Define the pathophysiology of neuropathic pain.
- g. Describe the anatomy of the sympathetic nervous system.
- h. Describe the pharmacology of drugs used for nerve blocks such as: local anesthetics, opiates, corticosteroids, and neurolytic agents.
- i. Describe how sympathetic nerve blocks (lumbar and stellate ganglion) are used for both diagnostic and therapeutic purposes. List the complications in performing these blocks.
- j. Define the common pathological changes in the lumbo-sacral spine that are considered to produce pain.
- k. Describe the characteristics of myofascial pain syndrome and the common location of trigger points.
- l. Describe the common clinical characteristics of neuropathic pain and some common diagnostic and therapeutic interventions.
- m. Explain the role of opiate (Oral, IV epidural or spinal) analgesics for acute post-operative pain control and indicate the side effects and complications in this setting.
- n. Define the use of local anesthetics (epidural and spinal) for acute post-operative pain control and describe the side effects and complications in this setting.

*C. Interpersonal and Communication Skills*

- 1. Communicate with psychological specialists for the purpose of evaluation and implementation of psychological approaches to pain management.
- 2. Establish and maintain professional relationships with the chronic pain patients, their families, and the nursing and support staff involved in their care.

*D. Practice-Based Learning and Improvement*

- 1. Self assess technique of performing one pain block to improve success rate.

*E. Professionalism*

- 1. Demonstrate a willingness to accept constructive feedback and change practice when indicated.
- 2. Treat patients with respect and dignity
- 3. Maintain honesty at all times.

*F. Systems-Based Practice*

- 1. Describe the purpose of a multidisciplinary pain clinic.
- 2. List the most common reasons for patient referrals.

3. Define a systems-based approach to chemical dependency.

### **Description of Resident Responsibilities:**

1. Residents are expected to:
  - a. Document all duty hours in New-Innovations
  - b. Document all procedures and consultations in the ACGME data-base
  - c. Complete all medical records in a timely and accurate fashion
  - d. Self-monitor for fatigue
  - e. Dress appropriately
  - f. Act in professional and ethical manner in interactions with patients, nursing and medical staff
2. Residents are expected to participate in the following activities during the workday:  
You should report to the Jefferson Pain Center at 7am unless otherwise directed. It is your responsibility to evaluate new and follow-up patients as assigned.
3. Residents will abide by all ACGME work rules. Unapproved tardiness and absenteeism is not tolerated.
4. Residents will attend all Departmental didactic lectures when available. This includes: Tuesday & Thursday 6:15 am lectures and Thursday Grand Rounds. Additionally, residents assigned to Simulation Lab activities should participate, at the discretion of the supervising attending.
5. The development of clinical skills and mature clinical judgment requires that residents be given responsibility, under proper supervision and commensurate with their ability, for decision making and for direct patient care in all settings. The resident's patient care responsibilities should include the planning of care, and the writing of orders, progress notes and relevant records, subject to review and approval by fellows and attending physicians.

### **Description of Didactic Experience:**

Participate in skills sessions, daily lectures, resident core conferences, anesthesia grand rounds,  
Participate in directed self-study  
Review assigned reading.

### **Evaluation Process:**

Electronic evaluations by supervising faculty  
Evaluation of rotation and faculty by resident

### **Feedback mechanisms:**

Review of resident evaluations with program director or faculty advisor  
Daily feedback from supervising faculty