

2002 Course Template

Course: Exploration of Pain Medicine

Course Number: 2002

Department: Anesthesiology & Pain Management

Faculty Coordinator: Humair Rana MD and Amy Woods, MD

Location: Parkland, UH, Zale

Length: 2 weeks

Prerequisites (if any): None

Periods offered: 1-12

Number of students: 2

First day Contact: Brian Frasure (brian.frasure@utsouthwestern.edu)

First day time: 7:30 am

First day location: Sprague Building, Anesthesia Office Suite

- I. **Course Description:** Medical students will rotate with faculty within the Department of Anesthesiology and Pain Management learning evaluation and management of acute and chronic pain conditions encountered in the outpatient and inpatient setting, including exposure to multidisciplinary care and interventional techniques. Students will spend up to two weeks in our Chronic Pain Clinic seeing a wide array of outpatient chronic pain conditions including neck and back pain, joint pain, cancer pain, neuropathic pain, and others. Students will also spend up to two weeks on our Inpatient Pain service where they will be exposed to peri-operative and inpatient pain management including post-operative pain, cancer pain, and acute pain from various other conditions.

II. **Learning goals/objectives/Assessments:**

Goals	Objectives	Assessment methods (examples)
Patient Care: To learn the components of a history and physical as they pertain to acute and chronic pain issues. To learn pharmacologic and non-pharmacologic strategies for acute and chronic pain management. To interact with and educate patients who have acute and chronic pain issues. To learn about aberrant behavior and addiction.	<ol style="list-style-type: none">1. To perform a focused yet thorough history and physical of patients with acute and chronic pain issues2. To utilize pharmacologic management of common acute and chronic pain conditions using opioid and non-opioid drugs, describe their mechanisms of action, and enumerate advantages and disadvantages of their use3. To utilize non-pharmacologic management of common acute and chronic pain conditions including	<i>The student will work one-on-one with an anesthesiology resident or faculty, who will incorporate the student into the care team. The student will receive individualized attention and formative feedback on his/her performance.</i>

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	<p>physical therapy, psychological interventions, pain interventions/surgery, and others</p> <p>4. To demonstrate the ability to develop rapport with patients who suffer from acute and chronic pain syndromes and educate patients on basics of pain management relevant to their condition</p> <p>5. To identify signs of aberrant behavior and addiction and institute appropriate treatment strategy.</p>	
<p>Medical knowledge: To learn pathophysiology of acute and chronic pain. To learn the relevant anatomy related to common acute and chronic pain conditions. To learn about the various pharmacologic and non-pharmacologic strategies for acute and chronic pain management. To learn the bio-psycho-social model of pain as well as related treatment strategies including multidisciplinary treatment models</p>	<p>1. To describe the pathways that are involved in acute and chronic pain.</p> <p>2. To be able to perform relevant musculoskeletal/neurologic exams and interpret imaging related to acute and chronic pain conditions.</p> <p>3. To describe the mechanism of action of the various opioid and non-opioid drugs</p> <p>4. To describe adverse effects of various opioid and non-opioid drugs</p> <p>5. To describe co-morbidities that are often associated with acute and chronic pain along with appropriate treatment strategies</p>	<p><i>The student will have guided discussions with assigned resident and faculty as part of clinical education and will be given formative feedback on fund of knowledge.</i></p>
<p>Interpersonal and Communication skills: The student will observe and engage in inter-professional communication. The student will observe and emulate behaviors conducive to good teamwork.</p>	<p>1. The student will list important behaviors necessary for good teamwork.</p> <p>2. The student will demonstrate basic communication skills necessary to work alongside other professionals (MDs, nurses, techs)</p>	<p><i>The student will be given regular feedback in a formative way.</i></p>
<p>Professionalism: To learn about techniques useful in engaging patients and developing empathy, along with providing compassionate and respectful care. To learn about the ethics of pain and conflict resolution. To understand a team approach to pain including appropriate engagement of and</p>	<p>1. The student will be punctual and complete all required work.</p> <p>2. The student will demonstrate respect and compassion for others.</p> <p>3. The student will demonstrate respect for patient privacy and autonomy.</p> <p>4. The student will engage in patient encounters and demonstrate the ability to develop rapport, show</p>	<p><i>The student will be observed and given feedback in real time as necessary.</i></p>

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communication with other disciplines	<p>empathy, and engage with the patient in a respectful and compassionate way in relation to their care.</p> <p>5. The student will be able to describe physician and patient conflicts in care along with strategies for resolution.</p>	
Practice Based Learning and Improvement	1. The student will identify topics of interest and demonstrate a focused literature review.	<i>The student will be observed giving a 10 minute oral presentation to her/his cohort and the end of the rotation.</i>
System based practice	1. The student will identify and describe the role of the multidisciplinary physician, nurse, and technician team that is necessary to care for patients in the perioperative period.	<i>The student will be observed and given feedback in real time as necessary in her/his interactions with the multidisciplinary team with respect to roles and functions.</i>

III. Methods of Instruction:

- a. Clinical observation
- b. Patient care encounters with supervision
- c. Didactic material via lecture and case presentation
- d. Suggested Readings

IV. Schedule: Monday through Friday, 800 am to 4 pm

V. Course requirements:

- a. Active participation as a team member in the clinical environment
- b. Case presentation at the end of the rotation

VI. Methods of evaluation:

- a. This is a pass/fail elective rotation per the standards of the UT Southwestern Medical School
- b. Evaluation and feedback based on direct observation of student's engagement in the team, interaction with patients, and active participation in clinical decision-making.

VII. Recommended reading:

- 1) Benzon H, Raja S, Molloy R, Lui S, Fishman S. Essentials of Pain Medicine and Regional Anesthesia. Churchill Livingstone, Philadelphia, 2005.
 - a. Ch 4 Physical Examination of the Pain Patient
 - b. Ch 5 Pain Assessment
 - c. Ch 6 Psychological Evaluation and Testing

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- d. Ch 8 Anatomy: Imaging and Common Pain-Generating Degenerative Pathologies of the Spine
 - e. Ch 11 Major Opioids in Pain Management
 - f. Ch 12 Minor and Short Acting Opioids
 - g. Ch 13 Opioid Therapy: Adverse Effects Including Addiction
 - h. Ch 15 Membrane Stabilizers
 - i. Ch 16 NSAIDs and COX-2 Selective Inhibitors
 - j. Ch 17 Muscle Relaxants
- 2) Pappagallo M and Werner M. Chronic Pain: A Primer for Physicians. Remedica, London, 2008.
- 3) Fishman SM. Listening to Pain: A Physician's Guide to Improving Pain Management Through Better Communication. Oxford University Press, 2012.