

PAIN MANAGEMENT

OBJECTIVES

Patient Care

Residents are expected to:

- Perform a focused PM&R related History and Physical exam for patients with chronic pain, with special attention to the musculoskeletal and nervous systems
- Elicit information using effective questioning and listening skills
- Diagnose physical, cognitive, and psychosocial impairments in patients with acute and chronic pain
- Create a differential diagnosis appropriate to the physical findings
- Demonstrate caring, compassion, and respectful behaviors (verbal and non-verbal) towards patients with chronic and often incurable pain
- Learn what tests are appropriate in patients who complain of pain, based upon the differential diagnosis
- Learn to interpret the findings of the ordered tests
- Create an organized, coherent, and comprehensive report that can be easily interpreted by referring physicians
- Integrate the findings to recommend rehabilitation treatment based upon the examination findings
- Outline the typical management of an acute, subacute, and chronic pain patient and be aware of the different approaches and differing concerns for each

Become proficient in:

- Writing appropriate therapy prescriptions for adult and pediatric pain patients that would also include appropriate activity restrictions and precautions
- Writing appropriate pain medication regimens including the use of long-acting and short-acting narcotics
- Coordinating care with consultants (e.g., goal-directed therapy, injections, medication prescriptions)
- Prescribing functionally and neurologically appropriate orthoses, assistive devices and durable medical equipment
- Screening patients to determine who is appropriately using pain meds and who is addicted to or diverting medications

- Evaluation, identification, and management of various different pain syndromes including sympathetically maintained pain (including CRPS / RSD), neuropathic pain, musculoskeletal pain and fibromyalgia / myofascial pain syndromes
- Instituting and using a pain contract
- The laws associated with prescribing Schedule II medications (also called controlled substances, class 2 or CII agents)

Understand, recognize, assess and manage the following secondary problems of pain patients:

- Addiction, pseudo-addiction, and tolerance
- Bowel management programs
- Contractures
- Depression and adjustment disorder
- Identify important considerations in the evaluation and management of the geriatric pain patient
- Obtain informed consent and document appropriate procedure note
- Perform epidural steroid injections, facet joint injections, sacroiliac joint injections, medial branch blocks, sympathetic blocks (stellate ganglion and lumbar sympathetic), and intravenous regional blocks
- Learn about the role of a pain psychologist and when to refer to them

Medical Knowledge

Residents are expected to:

- Learn the physiology and basic science behind pain syndromes
- Understand the theories behind common pain generators and their implication on management
- Learn the difference between neuropathic pain and nociceptive pain
- Discuss the modalities available to treat musculoskeletal pain. Discuss the mechanism of action, indications, and contraindications for each. (e.g., TENS, hot/cold modalities such as ultrasound, diathermy, icing)
- Be able to define and understand the difference between management, as well as clinical implications, of acute, subacute, and chronic pain syndromes
- Outline "The Gate Theory" of pain described by Melzack and Wall
- Discuss fibromyalgia, its diagnosis, and management
- Understand the concept and principles of Failed Back Syndrome
- Describe the common psychosocial consequences of chronic pain

Discuss the following medications, their mechanism of action, side effects, and indications/contraindications in patients with pain:

- Tricyclic antidepressants (e.g., amitriptyline)
- Anticonvulsants (e.g., Neurontin, Lyrica, Zonegran, and SSRIs) (e.g., Cymbalta, Effexor)
- Benzodiazepenes (e.g., clonazepam)
- Opiates, long-acting and short-acting (e.g., morphine, oxycodone, hydrocodone, fentanyl, methadone, Suboxone) and be familiar with the various methods of delivery
- Non-steroidal anti-inflammatories (NSAIDs)
- Others such as clonidine, Ultram, acetaminophen, capsaicin, Lidoderm patch
- Understand the indications for intrathecal pump placement for management of severe chronic pain. Describe the medications typically utilized, potential complications, contraindications, and efficacy.
- Discuss indications for axial steroid injections, the various techniques utilized, the potential complications, and efficacy. Be familiar with the medical literature describing these techniques.
- Understand the indications for implantation of a spinal stimulator and describe the mechanism for action, risks, benefits, costs, and efficacy in different populations with pain.
- Describe the indications for the use of Dorsal Root Entry Zone (DREZ) procedures. Understand the contraindications, risks, benefits, and costs.

Residents should know:

- Anatomy as it relates to regional anesthesia and main nerve blocks
 - Autonomic: stellate, celiac, lumbar sympathetic
 - Head and neck: cervical plexus
 - Extremities: brachial plexus, ulnar, radial, median, sciatic, femoral, lateral femoral cutaneous, obturator, ilioinguinal, lumbar plexus
 - Trunk – intercostals, paravertebral somatic
 - Spine – epidural, caudal, intrathecal
- Procedures, methods, and techniques for regional anesthesia and main nerve blocks
 - Peripheral and autonomic nerve blocks – indications, contraindications, techniques, clinical assessment, complications
 - IV regional – mechanism, agents, indications, contraindications, techniques, complications

- Painful disease states and their management
 - Types of pain – cutaneous, deep somatic, visceral, central
 - Specific pain syndromes – sympathetic dystrophy, phantom limb, low back pain, intractable cancer pain, causalgia, post-herpetic neuralgia, trigger points, fibromyalgia
 - Treatment
 - Drugs – analgesics, sedatives, stimulants, anticonvulsants, antidepressants, corticosteroids, capsaicin
 - Nerve block, epidural steroid injections
 - Others – transcutaneous nerve stimulation, acupuncture, spinal cord stimulators and pumps
 - Surgical and chemical neurolysis

Practice-Based Learning and Improvement

Residents are expected to:

- Critically review and analyze appropriate literature regarding pain management and pain management techniques
- Be familiar with the literature on interventional pain management techniques
- Become proficient with the use of the hospital's computer system in order to obtain medical records, lab results, imaging study results, and other ancillary notes
- Prepare lectures for the didactic lecture series to further enhance PM&R knowledge
- Educate and supervise junior residents, rotators and medical students who are spending time on the rotation
- Evaluate their own exam skills and pain medicine knowledge and incorporate feedback from others
- Use information technology (computers, journals, etc.) to access and manage patient information in order to support the resident's education and treatment decisions
- Contribute their findings to discussions on the care of the patient with other health care professionals
- Attend and participate in conferences and rounds in order to facilitate such discussions
- Investigate the outcomes of pain management treatments

Interpersonal & Communication Skills

Residents are expected to:

- Establish trust and maintain rapport with patients and family
- Explain basic pain management techniques to patients and families
- Educate patients and families about possible risks, complications, and benefits associated with pain management techniques
- Identify techniques in interacting with the patient with pain complaints who exhibits non-compliance with the prescribed therapeutic plan and /or has a history of substance abuse
- Appropriately convey medical and prognostic information to the patient, the patient's family and allied health staff
- Write reports with a clear diagnosis and plan
- Complete all chart notes and dictations in a timely manner
- Develop effective presentation and listening skills
- Develop appropriate communication skills when working with medical/surgical consultants from other specialties
- Develop skills in team management and leadership while working with the team members caring for the patient with pain
- Work as a part of the referral development team to enhance the efficiency of the admission process
- Identify and overcome obstacles to effective communication and care with the elderly pain patient
- Identify and overcome obstacles to effective communication and care for non-English speaking patients and patients of differing cultures

Professionalism

Residents are expected to:

- Demonstrate professional and courteous communication to the patient, the patient's family, referring physicians, and allied health staff
- Demonstrate ability to serve non-English speaking and English speaking patients equally through the use of interpreters when needed
- Recognize cultural / ethnic diversity and how that is reflected in the different pain management strategies
- Understand and adhere to HIPPA regulations
- Demonstrate understanding of cultural, age, religion, and gender differences in pediatric and adolescent patients

- Understand and demonstrate the ethical principles involved in managing patients with chronic pain
- Demonstrate reliability, integrity, honesty, and punctuality
- Demonstrate respect for the dignity of patients and colleagues
- Learn how to legally and appropriately terminate a patient from your practice

Systems-Based Practice

Residents are expected to:

- Outline a program of non-surgical rehabilitation management for chronic low back pain that incorporates system resources such as case management and vocational rehabilitation
- Learn when to refer to a multi-disciplinary pain management clinic, the costs and settings of such treatment, and what the outcomes might be
- Describe the components of a pain contract and the requirements for success in a large system of care
- Be familiar with referral options to specialists for more complex patients with pain
- Discuss the requirements for Pain Medicine Certification
- Understand what physicians are involved in the treatment of pain and what their role is
- Understand management limitations and when to request appropriate medical/surgical consultations from other specialties
- Advocate for patients who need tests and treatments that might be inappropriately denied
- Advocate for all patients equally within the healthcare system
- Recognize medical/legal issues with regards to prescribing chronic narcotics
- Integrate care of patients across hospital and community settings
- Learn when tests and pain procedures are appropriate or may be under- or over-utilized
- Understand the cost of the treatments and diagnostic tests that are ordered
- Understand documentation requirements and learn how to complete insurance paperwork

References

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