




Chronic Pain Management

Introduction to Pain Management

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About me

University of Vermont BSN 1994
R.AdamCowley Shock Trauma Center 94-99
Transplant Resource Center 99-2000
Virginia Commonwealth University MSNA-
CRNA 2002
Urban big Med Center Anesthesia 2 years
Rural Anesthesia 5 years
Pain management training 2 years
Full time pain management since 2009



PainCare locations

- Somersworth
- Merrimack
- Newington
- Wolfeboro
- Plymouth
- Woodsville (Cottage Hospital)
- Franconia
- Lebanon
- Littleton (Littleton Hospital)




About our business

- Comprehensive Pain Management
- Surgicenter/office based interventional
- Lab / PT / addiction clinic/suboxone clinic
- Monthly CME lectures/teaching/Journal Club
- Non profit wing which educates lawmakers as to the need for Prescription Monitoring Program, and to educate youth regarding experimentation with prescription RX



Pain Language

- **Pain**
- Pain treatment
- Pain management
- Comprehensive pain management



What is pain?

“An unpleasant sensory and emotional experience which we primarily associate with tissue damage or describe in terms of such damage, or both.”

IASP, 1985

What is pain?

“...pain is present whenever and wherever the patient says it is...”

McCafferty & Bebee, 1968

This is extremely outdated, we now “trust but verify”

Pain has three components:
bio-psycho-social




Pain has three components:
bio-psycho-social

- Bio - physical pain, location, quality, intensity and duration
- Psycho - fear, anxiety, depression, worry, guilt, anger, irritability, awareness, memory, experience-
- Social - family, friends, work, church, politics




Demographics of Pain

- Over 70 million Americans have chronic or recurring pain
- 70-80% of all PCP visits are generated by pain complaints
- \$90 billion/yr in direct medical expenses for back pain alone



Politics of Pain

- Patient Bill of Rights guaranteeing adequate pain relief.
- Jan 1, 2001 Congress “decade of pain”
- The “5th” vital sign

- 
- Acute pain: lasts less than 6 months, subsides once the healing process is accomplished.
 - Chronic pain: involves complex processes and pathology. Usually involves altered anatomy and neural pathways. It is constant and prolonged, lasting longer than 6 months, and sometimes, for life.



Realities of Pain

- Most acute pain is controlled or at least addressed by the current healthcare system
- Most chronic pain is not
- Barriers are profound and will likely grow, not lessen



Realities of Chronic Pain

- Historically, undertreated or untreated
- Not considered a priority
- Fear of addiction
- Fear of misdiagnosis
- Fear of weakness




Pain language

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What is Pain Treatment?

the reduction, or attempt to reduce pain, typically using one method of treatment (modality). Works optimally with acute pain.



What is a *modality*?

a specific therapeutic treatment, e.g. a perispinal steroid injection, destruction of a medial branch nerve to a facet, a trial spinal cord stimulation, soft tissue manipulation, ultrasound



What is Pain Management?

the reduction, or attempt to reduce pain *and suffering*, typically using many modalities.

“Pain management” implies a “primary care” function for the pain patient

Pain Clinic = single modality treatment
Pain Center = comprehensive management

Comprehensive Pain Management

a bringing together of a number of modalities in concerted fashion to control pain, such that the majority of all patients with pain and suffering may be benefited to varying degrees.

Comprehensive Approach: What type of care is expected?

- Eval / Diagnosis / Develop tx plan
- PT, Rehabilitation
- Cognitive Behavioral Medicine
- “Corrective” Surgery
- Opiates, Adjunctive non narcotic Rx
- Wide range of interventional treatment, e.g. nerve blocks, joint injections, neuromodulation, intrathecal pumps, neuroablation
- Addiction treatment

...more pain language...

Narcotic—obsolete term used to refer to what is now called opioid. Current usage is primarily in a legal context to refer to a wide variety of substances of potential abuse.

Treatment Outcomes

- Self-reported pain of little value
- Self-reported level of functioning better
- Disability level
- Return-to-work rates

Most Common Pain Generators

- surgeons
- myogenic
- discopathic
- radiculopathic
- facet/SIJ
- combo of above

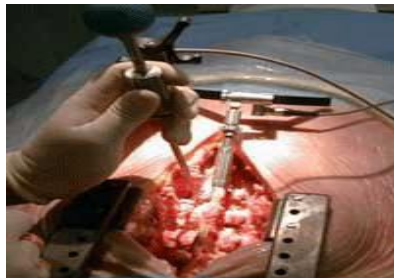
Most Common Pain Generators cont

- rsd/crps
- neuropathy
- zoster

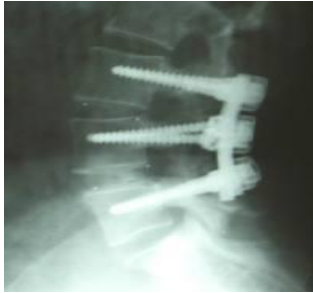
Surgical pain generators

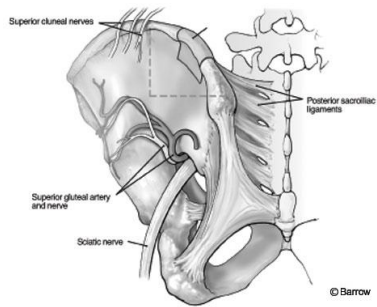
- Knee surgery
- Shoulder surgery
- Abdominal surgery
- Cervical surgery
- Lumbar and thoracic surgery
- Most common that I see #1.= Lumbar surgery addressing low back pain and radiculopathy

Lumbar Laminectomy

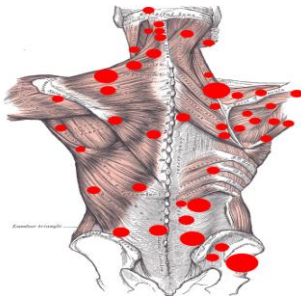


Lumbar Three Level Fusion





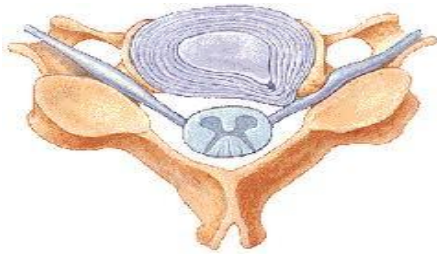
Myogenic/Muscle



Discopathic- Spinal Disc Pathology



Discogenic pain



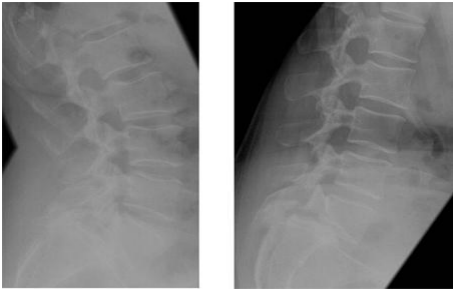
Discogram



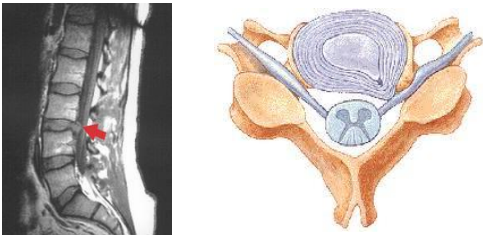
Gray Ramus Injection



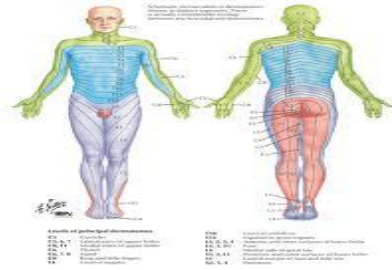
Spondylolisthesis: flexion/extension views



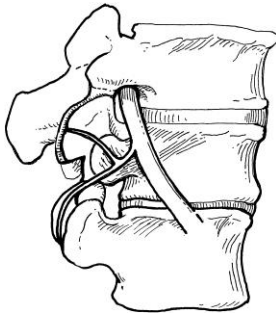
Radiculopathy - aka - Sciatica



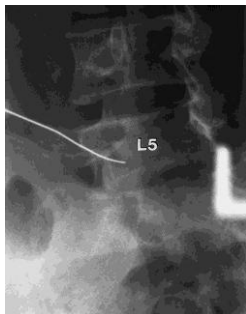
Dermatome Distribution

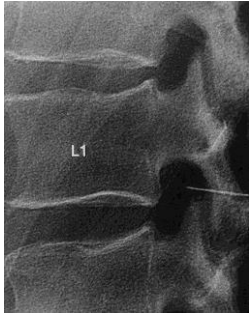


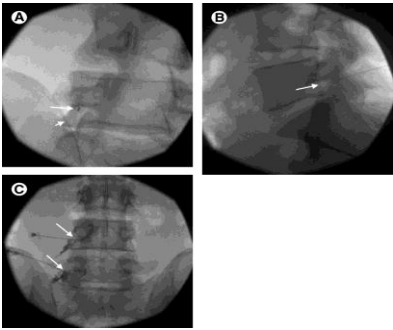
Drawing of a lumbar segment (axial view) shows the medial branch of the dorsal ramus of the spinal nerve root innervating a facet joint.



Prone oblique radiograph obtained with fluoroscopic guidance demonstrates the angled approach to the L5 foramen.







Frontal (a) and lateral (b) radiographs obtained with fluoroscopic guidance show a needle inserted into the sacral canal via the sacral hiatus.



Figure 19. Frontal epidurogram shows an epidural injection via the sacral hiatus.

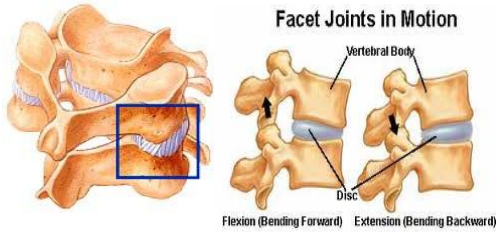


Silbergleit R et al. Radiographics 2001;21:927-939

RadioGraphics

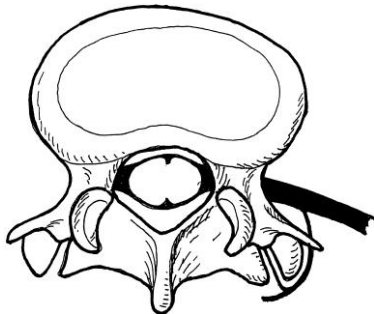
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Apophyseal joint / Facet joint



Flexion (Bending Forward) Extension (Bending Backward)

Figure 1a. (a) Drawing of a lumbar segment (axial view) shows the medial branch of the dorsal ramus of the spinal nerve root innervating a facet joint.

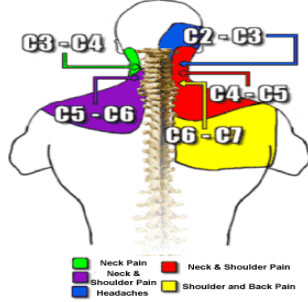


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RadioGraphics

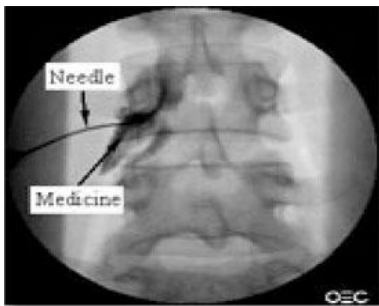
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Referred Pain Areas From Ligament Injury / Instability



Lumbar Facet Injection

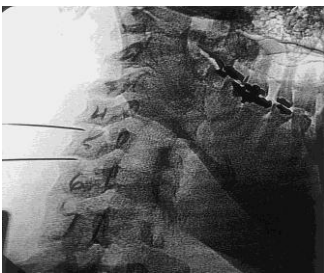


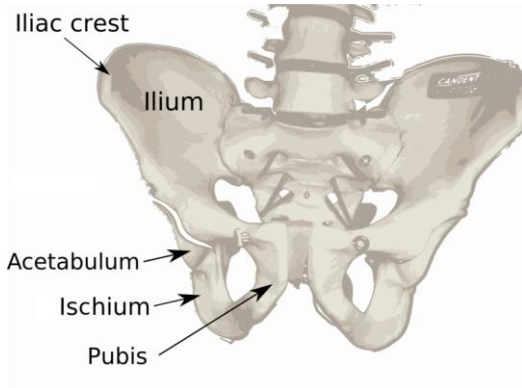


Cervical facet Injection



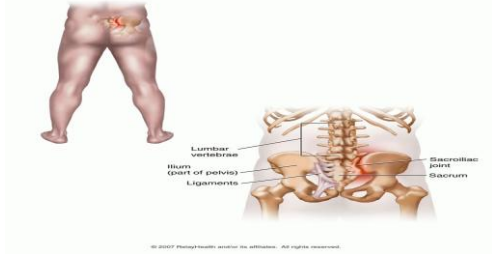
Cervical facet Injection





Sacroiliac Joint aka SI Joint

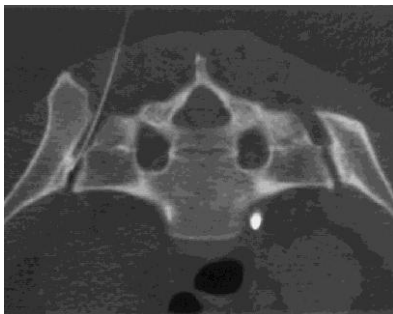
Sacroiliac Pain



SI Joint Injection 2 Needles



CT Guided SI Joint Injection



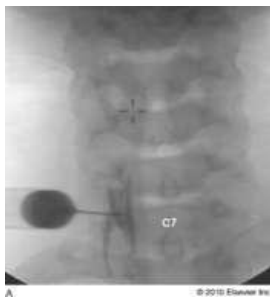
RSD/CRPS
Reflex Sympathetic Dystrophy
Complex Regional Pain Syndrome



CRPS/RSD



Stellate Ganglion Blockade



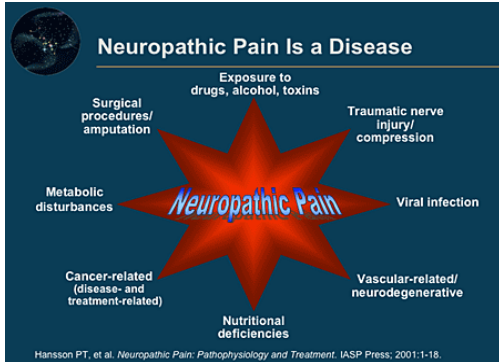
L3 Sympathetic Blockade



Neuropathy Neuropathic Pain



Neuropathic Pain Is a Disease



Neuropathic pain treatment

Postherpetic Neuralgia/Zoster



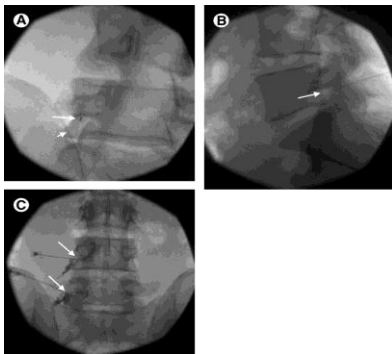
PHN/Zoster

Shows NO Mercy



Zoster Treatment

- Target Nerve root Quickly (even during acute rash)
- Anticonvulsants (gabapentin/Lyrica)
- TCA
- Analgesics (both non-opiate and opiate)
- Topical Lidoderm/capsaicin cream




Hot Political Issue

MD/DO pain specialists vs CRNAs



“Pain is a more terrible lord of mankind than death itself.”

Albert Schweitzer



Conclusion

- Pain management is difficult work, partly because pain is subjective and increasingly complex as it transitions from acute to subacute to chronic state.
