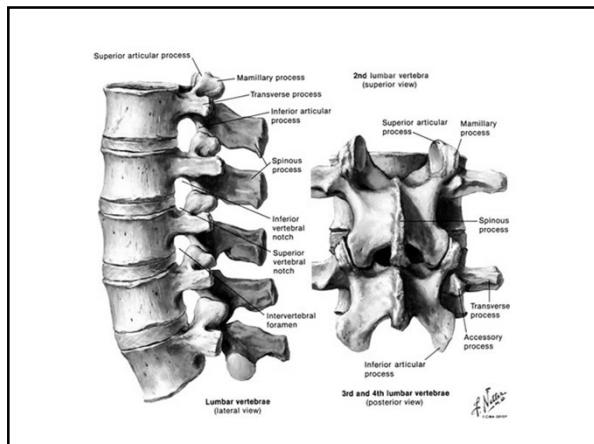


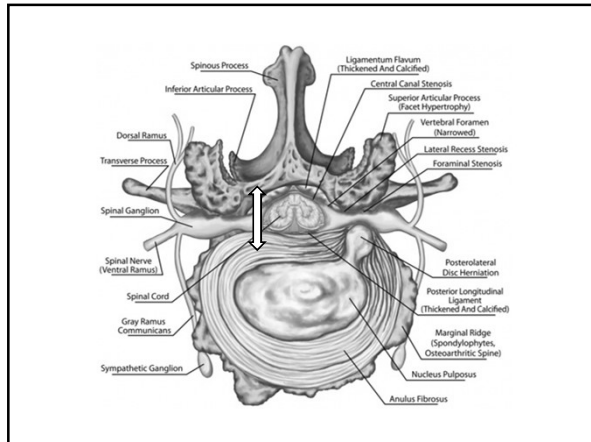
Non operative management of low back pain

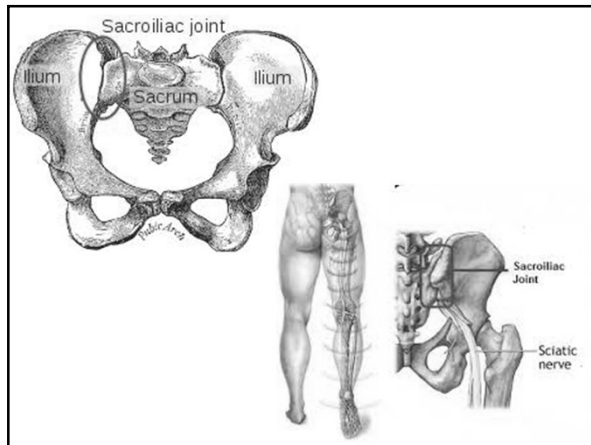
Ebby Varghese, M.D.
Comprehensive Pain Management Center
Medical Director
Assistant Professor of Clinical PM&R
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Basic statistics

- 84% of adults will have low back pain at some point
- >70% of patients with new onset low back pain will begin treatment by seeing their primary care provider first
- Total costs for low back pain in US is \$100 billion per year, two thirds are lost wages and decreased productivity
- Risk factors include smoking, obesity, age, female gender, physically strenuous labor, sedentary work, low education, anxiety, depression
- 4% of patients presenting to PCP will have a vertebral body compression fracture







Know the difference

- Acute vs Chronic low back pain
- <3 months
- > 3 months
- Generally 90% of new onset low back pain resolves within 30-90 days
- Red flags are unexplained weight loss, neurogenic bowel and bladder dysfunction (urinary retention/incontinence, fecal incontinence, saddle anesthesia), history of breast, prostate, lung, thyroid, kidney cancer, prolonged use of steroids, trauma, unexplained fever
- Imaging is not warranted in the first 30 days unless there are red flags or interventional or surgical action is planned
- Early imaging leads to increased frequency of unnecessary procedures. Early imaging does not improve outcomes and often times do not correlate with symptoms and if they do the magnitude of the findings do not necessarily correlate with clinical severity

Know the difference

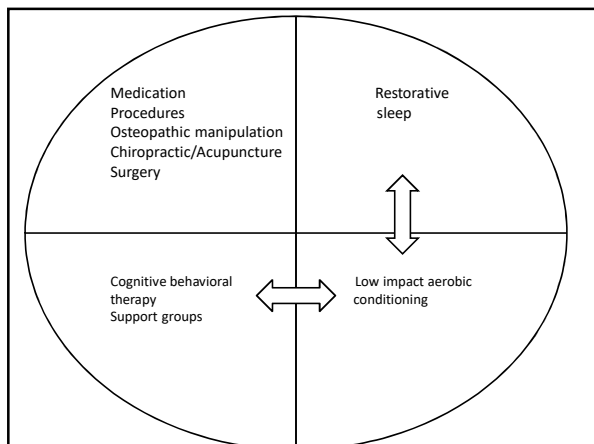
- Nocioceptive
- Neuropathic
- Mixed
- Sensory hypersensitivity or central wind up

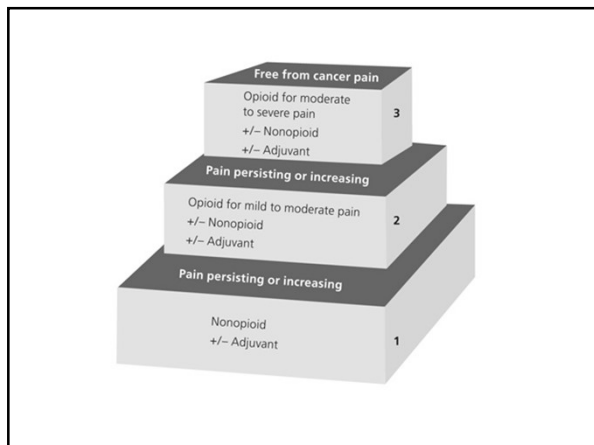
Causes of low back pain

- Myofascial
- Sacroiliac joint
- Lumbar facet joint
- Discogenic
- Spinal stenosis
- Compression fracture
- Pars defect
- Fibromyalgia

Multimodal pain management

- Medication/procedures/surgery
- Optimizing restorative sleep
- Low impact aerobic conditioning program- stationary bicycle, pool aerobics, rowing machine, yoga, tai chi
- Cognitive behavioral therapy- mindfulness, meditation, distraction
- Physical therapy
- Osteopathic manipulation for somatic dysfunction
- Chiropractic care
- Acupuncture
- Tens





Analgesic ladder

- Acetaminophen, NSAIDs, oral steroids, muscle relaxants, topical local anesthetic patches or creams, herbal agents like devils claw or willow bark, arnica montana, capsaicin
- Tramadol- opiate plus SSRI
- Opiates- option of last resort for chronic non cancer pain

Types of procedures that can be offered

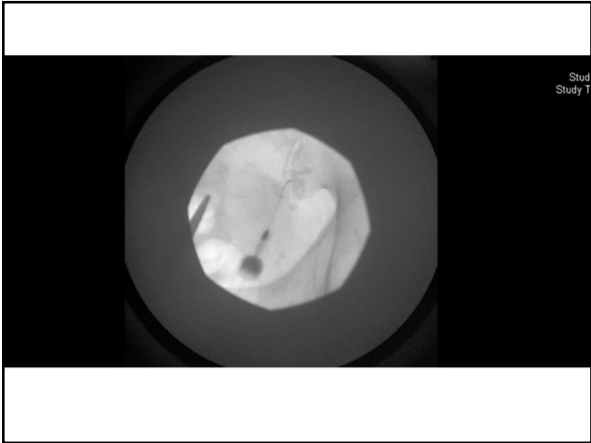
- Sacroiliac joint injections
- Lumbar intra-articular facet injections
- Epidural steroid injections
- Selective nerve root blocks
- Radiofrequency ablation
- Vertebroplasty
- Spinal cord stimulation
- Targeted drug delivery pump

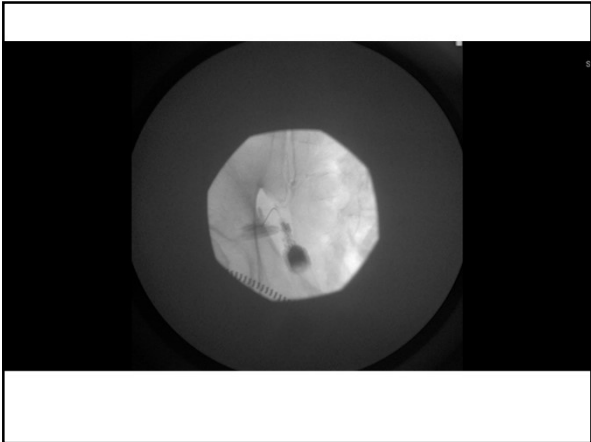
Not everything gets better with an epidural

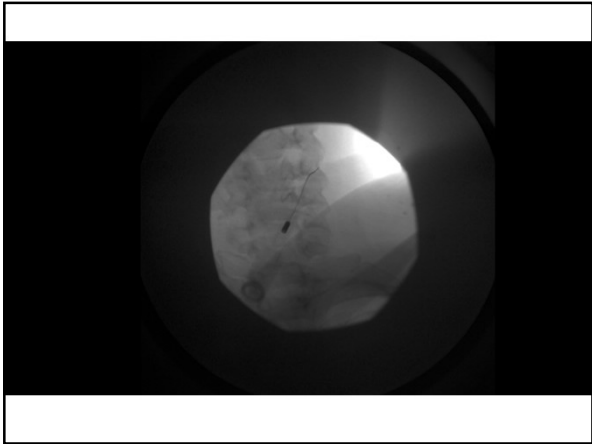
- Limitations in what can be offered if the patient presents with only axial spine pain
- Generally epidural steroid injections are ineffective unless the patient presents with a radiculopathy or neurogenic claudication
- Often times patients present with more than one pain generator
- Important to understand algorithm of care

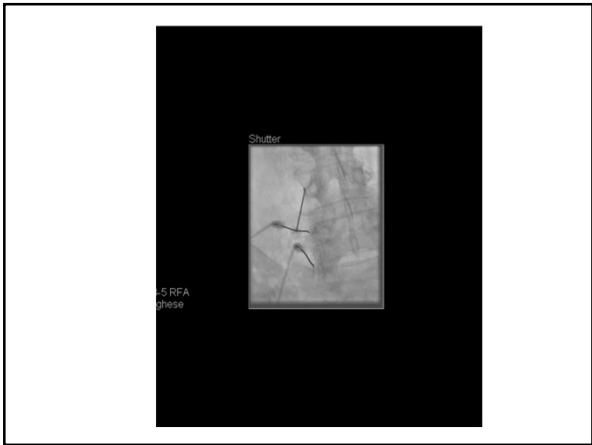
- The goal is to make a diagnosis then treat
- Some injections are diagnostic and therapeutic at the same time
- Others are just diagnostic for example,
 - SI joint injections vs facet medial branch blocks
 - Selective nerve root blocks vs transforaminal epidural steroid injections

- Some procedures are palliative only
 - Radiofrequency ablation
 - Spinal cord stimulation
 - Drug delivery pumps
 - Vertebroplasty

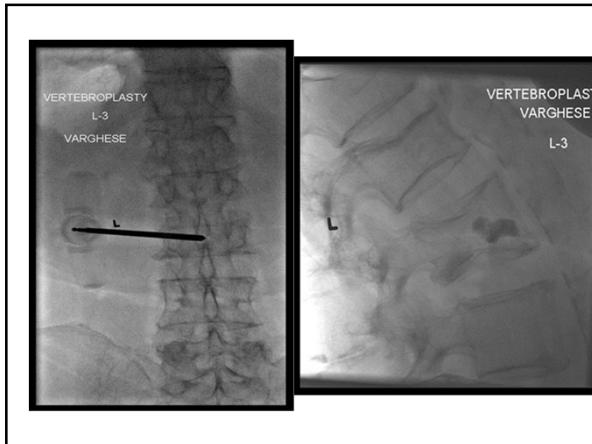






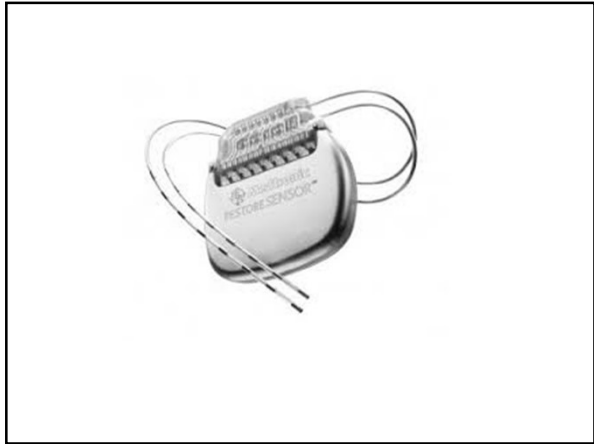
















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