Hey Doc My Back is Killing Me!

... SO NOW WHAT?
A Primer on When and How to Refer to a Spine Surgeon

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ROSEVILLE ORTHOPEDIC SURGERY AND SPORTS MEDICINE
First, the Basics

- Back pain affects 8 out of 10 people at some point during their lives

- $100 billion financial impact per year in the U.S. alone

- An NIH survey about pain in the last three months indicated that:
  - LBP was the most common (28.4%)
  - followed by severe headache or migraine pain (16.6%)
  - neck pain (15.1%)

- 10% of Americans have chronic back pain
Back and Neck Pain

- Sudden or insidious
- Constant or intermittent
- May be dull ache, sharp, burning sensation
- Can be in one place or radiate to side, buttock, legs, and neck
## Relevant History Points

- Recent trauma or inciting event
- Is pain worse with activity and which ones
- Relieved by rest and how long it takes to improve
- Radiating into legs and in what patterns
- Differentiate between back and leg complaints

- Prior history of LBP
- Bowel or bladder changes
- Osteoporosis
- Recent unintended weight loss
- Night pain
- Cancer history
- Kidney stone history
- Smoker
Causes of Back Pain

- **Muscles and Ligaments**
  - Sudden, awkward movements and strains
  - Improper lifting form

- **Nerve pressure or impingement**
  - Herniated discs
  - Collapsed disc spaces
  - Arthritic bone spurs
  - Displacement of vertebrae
### Evaluation

#### Physical Examination

- Range of motion
- Postural changes
- Obvious deformity or spasm
- Gait changes
- Extremity exam

- Sensorimotor deficits
- Pathological or absent reflexes
- Tension signs
- Perineal sensation and rectal tone
## Differential Diagnosis

<table>
<thead>
<tr>
<th>Spine</th>
<th>Imposter</th>
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<tbody>
<tr>
<td>Muscle sprain / strain</td>
<td>Hip pathology</td>
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<tr>
<td>Arthritic exacerbation</td>
<td>Trochanteric bursitis</td>
</tr>
<tr>
<td>Disc herniation</td>
<td>Oncogenic</td>
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<tr>
<td>Instability</td>
<td>Renal lithiasis</td>
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<tr>
<td>Vertebral compression fracture</td>
<td>Vascular claudication</td>
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<tr>
<td>Sacroiliac joint pain</td>
<td>Neuropathy</td>
</tr>
<tr>
<td>Infection / discitis</td>
<td>Medication side effect</td>
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<tr>
<td>Cauda equina syndrome</td>
<td>Stenosis</td>
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Front Line Treatment

- Short course of oral opioids
- Anti-inflammatories
  - Medrol dose pack, NSAIDs
- Muscle relaxers
  - Robaxin, Flexeril, Soma, Valium, Vino
- Gabapentin if radicular symptoms
- Activity modifications
- Heat / ice
- Physical therapy
Front Line Treatment

- Consider Referrals
  - Physical therapy
  - Acupuncture
  - Chiropractic
  - Monitored exercise (walking)

- Imaging typically NOT indicated (more on that later)
Front Line Treatment

- If improvement, advance as tolerated

- Minimize recurrence by making recommending improvements in
  - Aerobic conditioning
  - Stretching / yoga / pilates
  - Workplace ergonomics
  - Weight loss
  - Smoking cessation

- If no improvement...
Hey Doc My Back is STILL Killing Me! Aren’t you listening?!?

... SO NOW WHAT?
Second Line Workup

- Assess secondary gain and compliance of prior treatment

- Consider the differential diagnoses

- Consider imaging, but have a plan for the results
  - Plain Xray
  - MRI is the ‘Xray’ equivalent of the spine
  - CT generally not indicated unless MRI contra-indicated

- Beware ongoing opioids, the other medical strategies can continue safely

- Triage for referral to a Spine Specialist
To Whom Do I Refer?

PM&R
Interventional Radiology
Pain Management
Neurosurgery
Orthopedic Spine Surgery
How to Make a Meaningful Referral

WHAT DOES THE SPECIALIST REQUIRE PRIOR TO APPOINTMENT

WHAT CAN THE REFERRING PROVIDER EXPECT

WHAT CAN THE PATIENT EXPECT
What Does the Specialist Require Prior to Appointment

- It depends on the provider and practice to which you are making the referral

- Evidence and results of prior workup and treatment

- Does the practice have physician extenders that can complete a partial workup?

- Whether the patient will discuss surgery
Surgeons Specifically

- Imaging results are an absolute must for making invasive treatment decisions

- Reports alone are inadequate, we all read our own studies and they must be available to review with the patient

- If reasonable conservative care has not been pursued to failure, we rarely have surgical options
What the Referring Provider Can Expect

• Timely consultation appointment scheduling

• Closed loop communication after appointment with feedback on accuracy and effectiveness of Front Line Workup

• Resistance to prescribing medications or coordinating further referrals; make arrangements for ‘gap care’ once the referrals are made

• If the specialist has no treatment options, expect alternatives to be suggested. NO BOUNCE BACKS
What the Patient Can Expect

- Surgeons have no office based solutions available at the time of the initial consultation
- They will need to be patient with the workup and authorization process
- Some tests and treatments may be repeated
- To be thoroughly educated on their condition and treatment options
What the Patient Can Expect

- To have enough knowledge to make their own informed decisions about treatments
- Resources for furthering their understanding, including other patients serving as advocates
- Be encouraged to pursue as many opinions as they prefer
- Resistance to prescribing medications or coordinating further referrals
Now that I’m having surgery, tell me more about this minimally invasive thing...

It’s not a specific technique, but a philosophy
Conditions Treated

- Herniated discs
- Sciatica
- Stenosis
- Spondylolisthesis
- Radiculopathy
- Degenerative disc disease
- Failed back surgery syndrome
- Post laminectomy instability
Types of Procedures

- Microdiscectomy
- Lumbar laminotomy
- Endoscopic microdiscectomy
- Minimally invasive lumbar fusion
- Sacroiliac joint fusion
- Many others currently in development
Benefits of MIS

- Shorter recovery time
- Less blood loss
- Transfusions are rare
- Lower infection rates
- Less pain medication
- Earlier mobilization
- Outpatient procedures possible
- Shorter hospital stays
- Less tissue damage
- Lower cost
- Smaller incisions
<table>
<thead>
<tr>
<th>Barriers to MIS</th>
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<tbody>
<tr>
<td>• Technically challenging</td>
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<tr>
<td>• Trust the imaging</td>
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<tr>
<td>• Unlearn prior skills</td>
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<tr>
<td>• Unkept promises</td>
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<tr>
<td>• Indirect visualization</td>
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<tr>
<td>• Different anatomy</td>
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<tr>
<td>• More equipment</td>
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<td>• Radiation exposure to patient and surgical team</td>
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Benefits of MIS

- Not all surgeries are created equal (nor are all surgeons)
- The key is to perform just the right amount of surgery to get the job done (and do minimal damage to the surrounding structures)
Anterior Cervical Fusion Surgery
Traditional Lumbar Surgery Approaches

- Anterior Lumbar Interbody Fusion (ALIF)
- Posterior Lumbar Interbody Fusion (PLIF)
- Transforaminal Lumbar Interbody Fusion (TLIF)
Lumbar Fusion Surgery
LLIF for Scoliosis
B. O. – 82 y.o. woman
Thank you

Questions?

Thank you

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