Symptoms

• Back pain
• Shooting leg pain, numbness, tingling, weakness
• May or may not be symmetric
• Worse with walking, standing, sitting or lying down, twisting or turning
Other causes of back pain

- Infection
- Trauma
- Cancer
- Idiopathic
- Kidney stone, pancreatitis, abdominal aneurysm, or other non-spinal etiologies
When to see a specialist

• Pain does not improve in 2 weeks
• Everyday life activities are impacted

https://www.rd.com/article/shouldnt-wash-dishes-by-hand/
https://hikingwashington.com/best-hikes-near-seattle
X-Rays

Left lumbar spine X-ray showing normal anatomy.

Left lateral X-ray showing normal lumbar spine.

X-Rays

- T12
- L1
- L2
- L3
- L4
- L5
- S1

Left

Foramina = window

Facet Joint

[Images of X-rays showing the lumbar spine with annotations on vertebral levels and anatomical markers.]
Disc herniation

• Disc = jelly filled donut
• Incident with immediate back discomfort
• Develops worse back pain and leg symptoms the next day
Lumbar stenosis

- Stenosis = narrowing
- Walking and standing intolerance
- Improves with sitting, bending forward
- May also have shooting leg pain, numbness, tingling, weakness
Spondylolisthesis with stenosis

- Spondylolisthesis = slipped vertebrae
- Many causes, but most often:
  - Degenerative
  - Traumatic

Normal
Facet arthropathy

- Arthritic joint pain
- Back pain worse with twisting and turning motions
- Usually no or minimal leg symptoms
Osteopathic Compression Fractures

- Bone density test (DXA scan)
  - Females age 65+, Men age 70+
  - Medications, prior fracture after age 50
- Osteopenia vs Osteoporosis
  - Normal = ≥ -1.0
  - Osteopenia = -1.0 to -2.5
  - Osteoporosis = ≤ -2.5
- Predict fracture risk

84 yo white male, L1 osteoporotic compression fracture
Treatment

• Physical therapy
• Anti-inflammatories
  • Ice
  • NSAIDs (ibuprofen, naproxen, meloxicam, diclofenac)
  • Short course of systemic steroids
• Procedures: epidural steroid injection or facet joint injection
• Surgery