

## LOW BACK PAIN

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Week 4

### Educational Objectives:

1. Be familiar with “red flag” conditions in low back pain that may indicate underlying serious spinal pathology
2. Understand the indications and best studies to obtain for imaging the back
3. Be able to employ appropriate treatments for acute low back pain
4. Describe the typical course and prognosis of low back pain

### **CASE ONE:**

A 67-year-old woman comes to your office complaining of diffuse bilateral pain in her lower back for two weeks. There is no radiation to her legs. She denies trauma or heavy lifting. The pain is persistent at night. She denies dysuria, fever, chills, abdominal pain, nausea, vomiting, or weight loss. She has no morning stiffness. Her past medical history is significant for GERD and hypertension. She takes omeprazole and hydrochlorothiazide. She is a non-smoker and drinks one glass of wine at dinner.

### Questions:

1. What further history would you like to obtain? What “red flags” does she have? What are you concerned about?

### **CASE ONE CONTINUED:**

She denies intravenous drug use and has no known history of cancer. She had a normal mammogram six months ago and a negative colonoscopy three years ago. She has not taken corticosteroids, and her HIV status is unknown, but she has been monogamous with her husband of 40 years. She denies urinary retention or fecal incontinence. She has never had a DEXA scan and never smoked.

On exam, she is afebrile with normal pulse and blood pressure. She is a thin, comfortable-appearing woman. She has no spinal tenderness. Her straight leg raise and crossed straight leg raise are negative. Knee extension, plantar, and dorsiflexion are 5/5 bilaterally. Hip flexion, abduction, adduction, and extension are 5/5 bilaterally. Her patellar and Achilles reflexes are 2+ bilaterally. She has normal rectal tone and no saddle anesthesia.

2. **How does the history and physical exam help you to narrow your differential diagnosis?**
3. **Is there any indication for imaging at this point and, if so, what study would you request?**

**CASE ONE CONTINUED:**

**You order a plain film of the patient's lumbar spine on the day of her visit. The films are significant only for mild degenerative joint disease. There is no sign of fracture, mass, or any gross deformity of the vertebrae.**

4. **Given these findings, what do you recommend in terms of treatment?**
5. **What approach will you take with this patient with regards to prevention of future episodes of back pain?**

**Primary References:**

1. Kinkade S. Evaluation and Treatment of Acute Low Back Pain. *American Family Physician*. 2007;75: 1181-1188.
2. Jarvik J.G. et al. Diagnostic Evaluation of Low Back Pain with Emphasis on Imaging. *Annals of Internal Medicine*. 2002;137:586-597.

**Additional References:**

1. Koes, B.W. et al. Diagnosis and Treatment of Low Back Pain. *British Medical Journal*. 2006;332:1430-1434.
2. Koes B.W. et al. Acute Low Back Pain. *Clinical Evidence Concise (in American Family Physician)*. 2006;74.