

Case # 8 - Sciatica

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Presentation: A 70 year old man is referred to you because he is experiencing low back pain. About six months ago, he began to experience pain in his lower back. Lately, the pain has traveled down his leg. He explains that he is relatively healthy and an avid golfer, but has not been able to do much because of the pain. You begin to examine your patient and notice he lists to one side when he walks. He also states that bending or lifting heavy objects makes the pain worse over the back of his right thigh and the posterior lateral aspect of his right leg. You test his right limb for motion and find hip flexion and knee extension to be normal. He exhibits a negative Trendelenburg test but positive hopping test. His straight leg-raising test was positive.

Activities:

- I. Discuss why each of the above tests was done and what each test means.
 - What dermatome(s) exhibit pain?
 - Explain the basis of the Trendelenburg test and what the results indicate.
 - Explain the hopping test and what its results indicate.
 - Discuss the basis of the straight-leg raising test and what a positive test indicates.

II. Complete the following chart:

Joint	Movements	Prime Movers	Nerve Supply	Primary Nerve Root
Hip	Flexion Extension Abduction Adduction Inward Rotation Outward Rotation			
Knee	Flexion Extension			
Ankle	Dorsiflexion Plantar Flexion			
Tarsal	Pronation Supination			

- Based on your findings, diagnose the patient's problem.
- Would you order an MRI? Discuss the pros and cons of ordering such a test.

III. Discuss the pathophysiology of this patient's problem.

- Why does it hurt more when he bends or lifts things?
- What advice would you give him to help alleviate his pain?