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Evaluation of Sciatica in the Absence of Disk Herniation

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Evaluation of Sciatica in the Absence of Disk Herniation

Michael M. Weinik, DO, Scott J. Jarmain, MD, and Michael E. Frey, MD

INTRODUCTION

Back pain is one of the most common reasons for physician visits and is a frequent cause of disability. Radicular pain caused by disk herniation is the best defined of the back pain syndromes, and it has clear therapeutic options. In clinical practice, patients can present with the complaint of back pain with radicular symptoms but without disk herniation. Sciatica is the commonly used term to describe radiation of pain and/or paresthesias to either one or both of the lower extremities, but it is a symptom, not a disease entity. Sciatica may occur with or without concurrent low back pain and is a significant cause of functional decline and work absenteeism. For the clinician, being able to differentiate between discogenic and non-discogenic causes of sciatica is the first step in determining how best to address a patient's pain and facilitate a return to normal activities. Potential causes of sciatica may be within the axial skeleton, pelvis, or hip girdle or may be of viscerogenic or vascular etiology. This manual discusses several of the major nondiscogenic causes of sciatica, with emphasis on physical examination techniques.

FACET-JOINT-MEDIATED PAIN

INITIAL PRESENTATION AND HISTORY

A 33-year-old woman presents with a history of intermittent right-sided low back pain for the past 5 weeks with occasional radiation of pain through the right buttock to the proximal posterior thigh. She feels the pain when she hangs wash outside, plays tennis, and picks up her young children. She denies associated weakness, numbness or tingling in the lower limbs, saddle dysesthesia, bowel or bladder incontinence, or gait dysfunction. She denies any unintentional weight loss. She has no significant nocturnal discomfort, particularly if she does not sleep on her stomach. She denies any

recent or remote trauma. She has been swimming and playing tennis 3 times per week for the past 4 months as part of her fitness regimen. She had an uncomplicated pregnancy with delivery of a healthy girl 6 months ago. She has a 3-year-old son and remembers having similar back problems for a few weeks when he was 8 months of age. She finds partial and temporary relief of her discomfort with ibuprofen. Past medical history is otherwise unremarkable.

PHYSICAL EXAMINATION

The patient is a fit-appearing young woman. Vital signs are normal, and the general medical examination is unremarkable. On observation, her gait is normal, the thoracolumbar spine has normal curve, and there is no scoliosis or list. The sacral base is level. When the patient is asked to actively move, the lumbar spine motion is full in all planes. End ranges of spinal extension and combined side bending right and rotation right elicit complaints of discomfort across the right lumbosacral junction. No spinal motion either singularly or in combination produces radicular symptoms. Manual muscle testing reveals 5/5 strength throughout. Sensation is intact without distinct focal or dermatomal deficits, and muscle stretch reflexes are 2+ and symmetric.

- How can this patient's back pain be characterized?
- What is the next step in evaluation?

DISCUSSION

This patient has radicular pain that is activity-related in the context of a nonfocal neurologic examination and the absence of systemic symptoms. The lack of radicular symptoms distal to the knee, nonfocal neurologic examination, and reproducibility of symptoms with specific movements argue against a disk herniation and a visceral cause of her pain. The structures that could cause pain that radiates to the buttock area include soft tissue in the spinal and paraspinal area (such as connecting ligaments, annulus fibrosus, and muscles), the facet joint, the sacroiliac joint, and hip/pelvic structures.