Elucidating the Cause of Pelvic Pain

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KEYWORDS

- Chronic pelvic pain • Flexion, abduction, external rotation
- Posterior pelvic pain provocation test

KEY POINTS

- Chronic pelvic pain is a common condition.
- Establishing a diagnosis can be complicated by the interplay between various organ systems, including urologic, gynecologic, gastrointestinal, neurologic, endocrinological, psychological, and musculoskeletal.
- Frequently, the patient will have seen multiple providers and undergone multiple tests, as well as invasive procedures, before the musculoskeletal system is even considered in the differential diagnosis.
- Typically, the musculoskeletal and nervous systems become suspected culprits only once all other potential etiologies have been eliminated.

INTRODUCTION TO THE PROBLEM

Chronic pelvic pain is a common condition, and often represents the final focal point for many patients who present to urologists, obstetric/gynecological physicians, colorectal surgeons, gastroenterologists, urogynecologists, orthopedic surgeons, and physiatrists, to name but a few physician specialties. In many instances, the etiology is never clearly elucidated.[1] Establishing a diagnosis can be complicated by the interplay between various organ systems, including urologic, gynecologic, gastrointestinal, neurologic, endocrinological, psychological, and musculoskeletal. Frequently the patient will have seen multiple providers and undergone multiple tests and invasive procedures before the musculoskeletal system is even considered in the differential diagnosis. Typically, the musculoskeletal and nervous systems become suspected culprits only once all other potential etiologies have been eliminated.

PRESENTATION

A major complicating factor that needs to be overcome is patient reluctance to discuss issues of chronic pelvic pain with physicians. Additionally, many physicians

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are uncomfortable discussing these issues with patients. Patient complaints may include pain with Valsalva-type activities, ambulation, prolonged sitting, prolonged standing, lumbar flexion, and/or extension. Patients may note these in isolation, combination, or in concert with complaints of urinary urgency, frequency, sensory dysesthesias in the perineum, and in males, erectile dysfunction.

DIFFERENTIAL DIAGNOSIS

The differential diagnosis of pelvic pain is rather broad-based, and encompasses primary pelvic pathology, bony pelvic issues, central as well as peripheral nervous system source generators, and lastly musculoskeletal pathology (Table 1).

PHYSICAL EXAMINATION

Securing a history and performance of a detailed physical examination, emphasizing the neuromusculoskeletal system are essential if one is to hope to elucidate what may be wrong, and where the problem may be. The time course of the problem should be noted. Factors that exacerbate as well as relieve the pain should be noted. Interventions and medication trials should be delved into, with questioning focusing on response or lack thereof to the intervention or medication trial.

A significant amount of information can be gleaned by observing the patient while taking a history. Note how the patient sits, stands, walks to the examining room, changes position from sit to stand, and moves about the examining room.

Work by Neville and Fitzgerald revealed that women with chronic pelvic pain were more likely to have abnormal musculoskeletal physical findings than pain-free women when tested by physical therapists on a subset of tests within a battery of examination maneuvers, including positive flexion, abduction, external rotation (FABER), forced FABER, hip scour test, posterior pelvic provocation test, and pelvic floor muscle tenderness noted on transrectal or transvaginal palpation.[2]

Work up for pelvic pain should include a detailed evaluation of the lumbosacral spine and observation of gait. A painful Trendelenburg gait pattern typically is secondary to true intra-articular hip joint dysfunction and presents with groin pain. A painless Trendelenburg gait pattern is commonly seen in disorders that result in weakness of the gluteus medius musculature. This may be secondary to underlying primary muscle disorders (myopathies) and should be considered when the findings are symmetric.

Table 1
Differential diagnosis considerations of pelvic pain

Musculoskeletal	Peripheral Nervous System	Central Nervous System	Primary Pelvic Pathology
Hip joint/labral pathology	Lumbosacral (L5, S1) radiculopathies	Central nervous system disorders	Primary pelvic pathology
Lumbosacral spine	Primary sacral radiculopathy secondary to Tarlov cysts	Multiple sclerosis	Pelvic floor dystonia-muscle overactivity/ hypertonicity
Sacroiliac joint	Isolated pudendal neuropathy (bicycle rider's neuropathy)	Neuromyelitis optica	Pelvic floor congestion syndrome
Osteitis pubis	Peripheral neuropathy: toxic metabolic	Cervical/thoracic myelopathy	Gynecologic pathology
Ischial tuberosity bursitis	Small fiber neuropathy	Spinal tumors-conus and cauda equina	s/p anal sphincter or prostate surgery
			Postradiation therapy