

Kotarinos R¹, Fortman C¹, Neville C², Badillo S², O'Dougherty B³, Fraser L⁴, Lynch A⁴, Odabachian L⁵, Sanfield A⁵, Fitzgerald M P¹, Clemens J Q², Potts J³

1. Loyola University Medical Center, 2. Northwestern University, 3. Cleveland Clinic, 4. Stanford University School of Medicine, 5. Beaumont Hospital

PHYSICAL FINDINGS IN PATIENTS WITH UROLOGIC CHRONIC PELVIC PAIN SYNDROMES (UCPPS)

Hypothesis / aims of study

The UCPPS include Interstitial Cystitis / Painful Bladder Syndrome in men and women, and Chronic Prostatitis/Chronic Pelvic Pain Syndrome in men. Several studies have noted that musculoskeletal abnormalities are frequent in UCPPS patients, including the presence of chronic tension and tenderness of the pelvic floor musculature in many patients. Whether these musculoskeletal abnormalities found in UCPPS patients are primary or secondary phenomena is unknown. The objective of this analysis is to report on the range of musculoskeletal abnormalities present in a sample of UCPPS examined by physical therapists using standardized methods.

Study design, materials and methods

This analysis describes baseline data from a cohort of patients enrolled in a randomized, multicenter therapeutic trial for UCPPS, the results of which were previously reported elsewhere. At baseline, prior to any study treatments, patients at six centers were examined by physical therapists according to a standard protocol. Therapists documented the presence and severity of any connective tissue, muscular and skeletal abnormalities of the trunk, abdomen, hip girdle and pelvic floor including the presence of any trigger points (hyperirritable foci within muscle or connective tissue that produce pain when palpated and can cause a characteristic referred pain, tenderness and autonomic phenomena - trigger points can develop as a result of acute or chronic muscle overload, disease, direct trauma or infection) or sacroiliac joint pain.

Results

46 men and women were examined for myofascial trigger points and connective tissue restrictions. Muscular (myofascial) trigger points were common, and were most commonly found in the muscle groups detailed in Table 1.

Table 1: Most commonly identified muscular trigger points in 46 patients with UCPPS.

	N (%) with trigger point present in that muscle
Hip girdle musculature	
Gluteus Medius/Minimus	31 (69%)
Adductor Muscles	33 (72%)
Obturator Externus	24 (52%)
Iliacus	26 (56%)
Psoas Major/Minor	31 (67%)
Abdominal wall musculature	
Rectus abdominis	31 (67%)
Internal Obliques	16 (35%)
Transversus	16 (35%)
External Obliques	15 (33%)
Hip Girdle/Trunk	
Gluteus Maximus	21 (46%)
Piriformis	27 (59%)
Quadratus lumborum	24 (52%)

Non-muscular connective tissue restrictions (changes in the texture and structure of the skin and sub-cutaneous tissue, possibly due to trophic changes from reflex vasoconstriction) were also markedly common, as detailed in Table 2.

Table 2: Non-muscular connective tissue restrictions in a sample of patients with UCPPS.

	N(%) with connective tissue restrictions present in this region
Periurethral/retropubic space (women)	40 (89%)
Vulva(women)	19 (76%)
Labia majora/minora (women)	17 (68%)
Thigh, lateral:	29 (63%)
Over greater trochanter:	28 (61%)
Anterior thigh	30 (65%)
Medial thigh	40 (89%)
Tissue medial to ischial tuberosity	41 (89%)
Lower abdominal wall	43 (93%)
Inferior to umbilicus	43 (93%)
Upper abdominal wall	40 (89%)
Over sacro-iliac joint	35 (76%)
Over sacrum	33 (72%)

Lumbo-sacral paraspinal tissues	30 (65%)
Gluteal cleft/perirectal tissue	33 (72%)
Over gluteus maximus	33 (72%)
Posterior thigh	31 (67%)

Standard tests of sacroiliac joint pain and dysfunction and pelvic ring stability were less commonly abnormal, with just 8.7% demonstrating a positive Trendelenburg sign, 15.2% with a positive Forced Fabers maneuver, and 10.9% with a positive posterior pelvic propulsion test.

Interpretation of results

Our study found a very high prevalence of myofascial restrictions and trigger points in this sample of UCPPS patients. The areas examined were chosen based upon the documented referral patterns for pelvic viscera and our findings concur both with the landmark paper that established the referral patterns (1, 2) and with the findings of other, un-standardized case series. From our data we cannot say whether these abnormalities are primary pain generators, or are secondary to related visceral abnormalities. In contrast to our expectations the clinical measures of SI joint abnormalities were not frequently positive.

Concluding message

Somatic abnormalities, myofascial trigger points and connective tissue restrictions were found to be very common in patients with UCPPS. They may be the primary abnormality in at least some patients and offer therapeutically important treatment targets.

References

1. Head H. On disturbances of sensation with especial reference to the pain of visceral disease. Brain 16:1-132, 1893
2. Travell J G, Simons D G, Simons L: Myofascial Pain and Dysfunction: the Trigger Point Manual. Vol.1 Williams & Wilkins, Baltimore, 1999

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