Chronic Pelvic Pain Research—a Physical Therapy Perspective

Myofascial and central nervous system inputs play an important role in chronic pelvic pain (CPP) signaling [1]. The authors of the study “Trigger Points, Pressure Pain Hyperalgesia and Mechanosensitivity of Neural Tissue in Women with Chronic Pelvic Pain” examine neurodynamics in women with chronic pelvic pain, investigating how the biomechanical, physiological, and morphologic functions of the nervous system contribute to pain. Physical therapists aid in improved function and decreased disability from chronic pelvic pain by combining a biopsychosocial approach with myofascial evaluation and treatment techniques. A physical therapy systematic exam is based on a model of regional interdependence that assesses movement dysfunction including impaired local or global relaxation. Physical therapy interventions may include treatment of myofascial trigger points (TrPs), neural glides, pain neuroscience education, graded exposure/graded activity, and cognitive functional therapy. This study highlights the importance of pelvic physical therapy evaluations and presents opportunities for identifying neurodynamic pain generators to aid in the development of effective pelvic pain treatment strategies.

This article demonstrates similarities between CPP and other chronic pain disorders with peripheral and central inputs such as headache, whiplash-associated neck pain, and low back pain. As seen by increased widespread pressure pain, in addition to increased localized mechanosensitivity and TrPs around the pelvis in study subjects vs controls, nociception changes, or central sensitization, contribute to the pain experience and may arise from altered nociception without clear evidence of actual or threatened tissue damage or evidence of disease-activating peripheral nociceptors [2]. This also illustrates the possible role for regional interdependence in investigating pelvic pain [3]. Physical therapists use the concept of regional interdependence in the allostatic or homeostasis of the musculoskeletal, somatovisceral, neurophysiological, and biopsychosocial process to elicit musculoskeletal changes in their patients. Rates of anxiety and depression are higher in the CPP group vs controls, suggesting another avenue by which allostatic and subsequent nociceplastic changes may be remedied. The role of central pain amplification in the development of pelvic pain can explain why therapies aimed at removing endometrial lesions, for instance, are not effective in relieving all pelvic pain symptoms in patients with endometriosis [4].

Future research in both men and women with CPP may benefit from utilizing the methodologies presented in this paper, including mechanosensitivity and pressure pain thresholds in local and distal sites. Additional information on central sensitization can be examined using self-reported screening tools such as the Central Sensitization Inventory [5]. In regards to TrP evaluation, questions often arise about the validity of the clinical exam for determining trigger points [6,7], such as the actual location of TrPs in the gluteus minimus, as it lies deep to the gluteus medius. The gluteus minimus and medius, together with the obturator internus, help to stabilize the pelvis. The obturator internus is the only muscle to lie within and outside of the pelvic floor basin; consequently, trigger point pain in the obturator internus may have a regional effect on trigger point pain externally, contributing to the regional interdependence model. Future studies are needed to clarify techniques in determining exact trigger point activity and increased pressure pain sensitivity within the pelvic floor, not just externally, and their relationship to pain generators that can occur as part of the mechanosensitivity resulting from injury, disuse, and altered biomechanics.

A physical therapy approach to studying CPP provides a rich perspective on optimal CPP evaluation and treatment targets. High-quality research is needed to elucidate acute vs chronic and peripheral vs central pelvic pain mechanisms. Future studies may utilize additional quantitative sensory testing methodologies, such as vibration and thermal sensitivity, or assessment of myofascial trigger points using ultrasound [8] to allow for more nuanced TrP evaluations, pelvic floor experimental pressure pain sensitivity, and afferent duration measurements following pelvic floor stimulation [9].

**References**


PRESIDENT’S MESSAGE

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AAPM 2019 Annual Meeting Preliminary Program: A Message from the AAPM President

It is my pleasure as President of the American Academy of Pain Medicine (AAPM) to invite you to attend the AAPM 35th Annual Meeting & Preconferences, March 6–10, 2019, in Denver, CO.

More than 100 million American adults suffer from chronic pain, making pain more prevalent than heart disease, cancer, and diabetes combined. Addressing this public health problem of pain while also facing our nation’s opioid crisis continues to be a primary challenge, responsibility, and—ultimately—opportunity for the field of pain medicine. The 2019 AAPM Annual Meeting features state-of-the-art advancements in pain medicine and is a must-attend event for clinicians and their team members treating patients in pain. It has been designed to advance clinical practice that is mechanism-guided, evidence-based, and personalized in nature.

The 2019 AAPM Program Committee—chaired by Stephen Cohen, MD and Patrick Tighe, MD—have designed an enlightening educational program. Exciting features of this year’s meeting include:

- Keynote speeches by some of the most well-known star speakers on best practices of pain medicine, new insights and discoveries from the latest research, and emerging innovative solutions to address the dual crises of chronic pain and the opioid epidemic;
- Multiple tracks on the full spectrum of pain management modalities that include non-pharmacological, pharmacological, interventional, and surgical approaches;
- Informative pro-con debates on controversial topics by some of the most influential leaders in pain medicine;
- Problem-based learning discussions moderated by renowned experts on topical, provocative, and underserved areas of pain medicine;
- Programs specifically designed for physicians in training, taught by outstanding Pain Fellowship Program Directors; and
- Premier education focusing on best practices to treat patients with acute, chronic, and end-of-life pain through an integrated multidisciplinary approach.

All meeting activities will take place at the Denver Colorado Convention Center, situated in downtown Denver with mountain views and in walking distance to local attractions. Learn more about visiting Denver and hotel amenities.

Be sure to register and book your hotel room early, and visit annualmeeting.painmed.org for the latest information about the meeting.

I look forward to seeing you in Denver this March.

Sincerely,

JIANGUO CHENG, MD, PhD
President, American Academy of Pain Medicine,
Chicago, Illinois, USA