CME

The Role of Pelvic Floor Physical Therapy in the Treatment of Pelvic and Genital Pain-Related Sexual Dysfunction

Talli Y. Rosenbaum, PT,* and Annette Owens, MD, PhD†

*Private Practice, Tel Aviv, and Jenisalem, Israel; †Charlottesville Sexual Health and Wellness Clinic, Charlottesville, VA, USA

ABSTRACT

Introduction. Chronic pelvic pain (CPP) in women and men is associated with significant sexual dysfunction. Recently, musculoskeletal factors have been recognized as significant contributors to the mechanism of pelvic pain and associated sexual dysfunction, and in particular, pelvic floor muscle hypertonus has been implicated.
Aim. The purpose of this Continuing Medical Education article is to describe the musculoskeletal components involved in pelvic and genital pain syndromes and associated sexual dysfunction, introduce specific physical therapy assessment and intervention techniques, and provide suggestions for facilitating an effective working relationship among practitioners involved in treating these conditions.
Methods. A review of the relevant literature was performed, clarifying current definitions of pelvic pain, elucidating the role of musculoskeletal factors, and determining the efficacy of physical therapy interventions.
Results. A review of the role of physical therapy for the treatment of pelvic pain and related sexual dysfunction.
Conclusions. Physical therapy treatment of pelvic pain is an integral component of the multidisciplinary approach to CPP and associated sexual dysfunction. **Rosenbaum TY, and Owens A. The role of pelvic floor physical therapy in the treatment of pelvic and genital pain-related sexual dysfunction. J Sex Med 2008;5:513–523.**

Key Words. Pelvic Pain; Dyspareunia; Sexual Dysfunction; Pelvic Floor; Physical Therapy

Introduction

Pelvic pain in women [1] and in men [2] is associated with significant sexual dysfunction. While chronic pain impacts all aspects of functioning, including work, family relationships, and social activities, the most frequent complaint cited by patients with chronic pelvic pain (CPP) is sexual dysfunction [3]. Factors contributing to sexual dysfunction in patients with chronic pain are multifactorial and contextual [4], and may be related to comorbidity with depression [5,6], use of antidepressant medications [7], and relationship satisfaction [8], among many other factors. CPP may have a higher association with sexual dysfunction than other types of chronic pain. CPP has been correlated with increased rates of past sexual abuse [9], which may impact negatively on sexual function [10]. CPP specifically involves areas intimately connected to sexuality, which may negatively impact one's body image and sexual self-esteem [11], and also affects both partners in the relationship [12]. Specific presentations, such as infertility associated with endometriosis [13,14] and lower urinary tract symptoms including urinary frequency and urgency common in interstitial cystitis (IC), affect sexual function as well [13–15]. Gastroenterological conditions, such as celiac disease [16] and irritable bowel syndrome (IBS) [17], affect sexual comfort. Finally, physiological correlates may exist, most notably related to pelvic floor dysfunction, which impact both pain and sexual function [18]. This article will describe some of the musculoskeletal contributors to pelvic and genital pain syndromes and associated sexual dysfunction, introduce specific physical therapy assessment and intervention techniques, and provide suggestions for facilitating a working relationship among

physical therapists, sex therapists, and physicians treating these conditions.

Defining CPP

Whereas acute pelvic pain is a symptom of underlying tissue injury or disease, CPP, the duration of which may be 3 months to several years *is* the disease itself. CPP is a term, which includes but poorly defines specific syndromes such as endometriosis, IC, vulvodynia, vulvar vestibulitis syndrome (VVS), and prostatitis/prostadynia. Prevalence rates vary widely because of a lack of clearly defined parameters regarding what conditions constitute CPP. There is a lack of consensus regarding whether female genital pain, such as in VVS, should be considered a vulvar rather than pelvic pain condition [19], although male genital pain generally falls under the category of pelvic pain. There is also a lack of consensus regarding which specific criteria in regard to duration of pain, location, intensity, and etiology define CPP [20], and attempts to classify the types of CPP tend to group syndromes according to which systems are affected (see Table 1).

In clinical practice, it is not unusual for patients with CPP to visit different specialists and receive different diagnoses such as IC, vulvodynia, IBS, and sexual pain disorder by a urologist, gynecologist, gastroenterologist, and sexologist, respectively. Separate organizational bodies attempt to classify pelvic pain according to descriptive symptoms reflective of specific specialties. Pelvic pain classification has been proposed by the National Institutes of Health for prostatitis and nonprostate-related pelvic pain [23], the International Society for the Study of Vulvovaginal Disease for vulvar pain syndromes [24], and the International Continence Society, which focuses on urinary dysfunction [25]. Despite classifications that appear to reflect specific disciplines, and thus, specific organ involvement, current understanding of CPP points to multiple etiologies, and as such, research has begun to focus on discovering the causes, which affect multiple systems, such as organ cross talk [26]. Pudendal neuropathy, hernias, and pelvic congestion have been considered as causal factors, and recently, musculoskeletal dysfunction has been suggested as playing a significant role in CPP [27,28]. Whether or not organic or systemic pathology is identified, musculoskeletal causes should be considered as the mechanism linking these disciplines with specific attention paid to pelvic floor function [29,30].

Pelvic Pain, Sexual Dysfunction, and Sexual Pain

Sexual dysfunction characterizes pelvic pain. Male pelvic pain is associated with premature ejaculation [31] and erectile dysfunction [2,32]. Decreased libido and arousal are associated with pelvic pain in men [2] and women [33]. However, pain during sexual activity appears to be the sexual dysfunction most highly associated with pelvic pain [34]. Although the term "sexual pain" implies a uniquely sexual quality to the experience of pain, sexual pain disorders are primarily pain disorders that interfere with sexual activity [35]. Sexual pain disorders are usually considered female disorders [36,37] and are classically divided into vaginismus and dyspareunia. Dyspareunia can be further divided into superficial and deep pain, with the former associated with diagnoses such as VVS, and the latter associated with pelvic pathology such as endometriosis [38]. Both types of dyspareunia are multifactorial and are influenced by visceral, hormonal, inflammatory, neuropathic, and musculoskeletal and psychosexual components [39]. However, the current definitions fail to include the experience of pain with genital arousal, pain with orgasm and/or ejaculation, male genital pain with touch, erection, penetration or ejaculation, and anodyspareunia, which refers to anal pain with receptive intercourse whose incidence is 13% among gay men [40].

Pelvic Floor Muscle Anatomy and Function

The pelvic floor muscles attach from the pubic bone anteriorly, to the coccyx posteriorly, and form a bowl-like structure, along with ligaments and fascial tissue. The muscles of the pelvic floor consist of superficial muscles including the bulbospongiosus, ischiocavernous, superficial transverse perineal and external ani sphincter muscles, an intermediate layer consisting of the deep transverse perineal, and the deeper muscles known collectively as the "levator ani" muscles, which consist of the pubococcygeous and iliococcygeus. The levator ani act to lift up the pelvic organs and are active during defecation. The puborectalis muscles act together with the external anal and urethral sphincters to close the urinary and anal openings, contract the sphincters, and prevent urinary or fecal leakage.