

W23: ICS Core Curriculum (Free): The evidence base for physiotherapy in the peri-partum period and male pelvic pain

Workshop Chair: Doreen McClurg, United Kingdom
04 September 2019 11:00 - 12:30

Start	End	Topic	Speakers
11:00	11:05	Introduction	Doreen McClurg
11:05	11:25	Update on the prevention of pelvic floor dysfunction during childbirth	Hege Johannessen
11:25	11:35	Discussion	Rhonda Kotarinos Hege Johannessen Jeannette Potts Doreen McClurg
11:35	11:40	Introduction	Rhonda Kotarinos
11:40	12:00	Male Pelvic Pain - current management options	Jeannette Potts
12:00	12:20	Physiotherapeutic management of male pelvic pain - current evidence	Rhonda Kotarinos
12:20	12:30	Discussion	Rhonda Kotarinos Jeannette Potts

Aims of Workshop

The aim of the first half of the workshop is to identify and discuss the importance of exercise during and after labour to maintain function and quality of life both of the women and the fetus with life-long implications for both.

The aim of the second half of the workshop is firstly to describe current thinking in the aetiology and management of male pelvic pain and then to look at the physiotherapeutic options and in detail the complete physical therapy protocol that was the basis for an NIH funded study on the feasibility for the utilization of physical therapy to managed chronic pelvic pain syndrome (CPPS).

Learning Objectives

At the conclusion of the first presentations, the participant will be able to

1. understand the rationale and evidence behind the use of exercise during pregnancy to prevent and treat pregnancy related-diseases and improve health in mother and baby in the short and long term.
2. understand the rationale and evidence behind the use of pelvic floor muscle exercises in the prevention and treatment of pre-, and postnatal urinary and anal incontinence as well as obstetric anal sphincter injuries.
3. discuss and implement relevant adherence strategies to promote continence pre-, and postpartum.

At the conclusion of the second and third presentations the participants will have a better understanding

1. of the evidence for PT for pelvic pain in men,
2. the importance of differential diagnosis
3. the need for further research which is of high quality.

Target Audience

PTs with a specialist interest in peri-partum exercise and/or male pelvic pain

Advanced/Basic

Intermediate

Suggested Learning before Workshop Attendance

ACOG Committee Opinion No. 650: Physical Activity and Exercise During Pregnancy and the Postpartum Period. *Obstet Gynecol.* 2015 Dec;126(6):e135-42

Woodley SJ, Boyle R, Cody JD, Mørkved S, Hay-Smith EJC. Pelvic floor muscle training for prevention and treatment of urinary and faecal incontinence in antenatal and postnatal women. *Cochrane Database Syst Rev.* 2017 Dec 22;12:CD007471

Fitzgerald, Anderson, Potts, et al. and UPPCRN: Randomized Multicenter Feasibility Trial of Myofascial Physical Therapy for the treatment of Urologic Chronic Pelvic Pain Syndromes. *J Urol*, 182: 570-580, 2009.

Hanno P, Burks AD, Clemens JQ. Diagnosis and Treatment of Interstitial Cystitis Bladder Pain Syndrome. *AUA Guideline* 2014

Presentation 1 - Update on the prevention of pelvic floor dysfunction during childbirth

Hege Johannessen

Pregnancy is a risk factor for developing diseases such as gestational diabetes mellitus and preeclampsia which are associated with short- and long-term morbidity in both mother and offspring. Over the last 30 years, a substantial body of literature has emerged suggesting that adverse conditions during intrauterine development may have lasting effects on foetal physiology and metabolism, resulting in increased disease susceptibility in adulthood. Further, musculo-skeletal problems such as pelvic floor disorders (PFD) and lumbopelvic pain are frequently reported in pregnancy as well as postpartum. Regular exercise has several documented positive effects throughout life, and ensuring adherence is inexpensive. Pregnancy is a well-suited time for behaviour modification, and healthy pregnant women are encouraged to engage in regular exercise during pregnancy to achieve or maintain the same health benefits as in the non-pregnant state. Moreover, the recent ACOG committee opinion introduced the fourth trimester, recommending postpartum care to be an on-going process

Nearly one in four women aged 20 years or older suffer from at least one PFD with urinary (UI) and anal (AI) incontinence being amongst the most commonly reported PFDs. PFDs may lead to significant emotional and physical distress, loss of self-esteem, social isolation and reduced quality of life (QoL). In women, AI and UI are associated with (first) pregnancy and delivery, age, chronic cough and diarrhea. Severe perineal tears grade 3 and 4, collectively referred to as obstetric anal sphincter injuries (OASIS), are among the most prevalent risk factors for postpartum AI in both the short as well as the long term. Previous findings suggest that women experiencing AI have a higher prevalence of persistent injury of the anal sphincter complex compared to age-matched controls without AI. Additionally, experiencing AI nine months postpartum is associated with long term AI. Several national guidelines recommend that women who have sustained an OASI at delivery are referred for routine follow up by obstetricians or colorectal surgeons and specialist physiotherapists at dedicated anorectal clinics. The effect of pelvic floor muscle training (PFMT) in preventing and treating UI in pregnancy and postpartum is well documented. Little is known about PFMT and the effect in prevention and treatment of AI in pregnancy or postpartum. However, a recent randomized controlled trial showed that weekly PFMT may reduce postpartum AI experienced during the first year after delivery. Incorporating PFMT in general exercise programs during pregnancy has proven to reduce incontinence during pregnancy and postpartum. However, studies suggest that targeted interventions may be more beneficial than offering PFMT to all pregnant and postpartum women. Thus, early identification and treatment of women experiencing or at risk of incontinence and perineal trauma may reduce the prevalence, and the long term adverse effects of PFDs with regards to personal as well as societal costs.

Presentation 2 - Male Pelvic Pain - current management options

Jeannette Potts

As early as 1963 (Gonder) and 1979 (Segura), experts were debunking the myth of prostatitis and infection. Yet, sadly, patient care and research was hampered by the NIH-NIDDK Prostatitis Classification System. (1995)

In 1997, this speaker presented a drawing of a prostate gland behind bars, exclaiming, "I was framed!" to the International Prostatitis Collaborative Network meeting. And in 2001, she presented her research to the AUA, entitled, "Prostatitis: Urology's brand of Functional Somatic Syndrome." Today, this is termed Central Sensitization Syndrome (CSS).

Small series demonstrating benefit of non-prostatocentric approaches, namely biofeedback and/or physical therapy, showed promise. (Clemens, 2000; Cornel, 2005; Anderson 2005)

In 2009, we were able to prove that physical therapy, in selected patients was not only feasible, but effective. (Fitzgerald, 2009).

Recently, Multidisciplinary Approach to the Study of Chronic Pelvic Pain (MAPP) research has corroborated the importance of CSS in this clinical setting:

- a. 75% of patients suffer from pain beyond the pelvis. The greater the number of pain locations, the greater the pain severity (outside the pelvis). Besides pain severity, pain beyond the pelvis was associated with

significantly greater sleep disturbance, depression, anxiety, psychological stress and negative affect scores, and worse quality of life. To me, this seems highly suspicious for CSS. (Lai,2017)

- b. The extent of widespread pain and non-uological symptoms were predictive of poorer outcomes, over the course of one year. (Naliboff, 2017)
- c. Both male and female UCPPS patients show higher levels of current and lifetime stress, poorer illness coping, increased self-report of cognitive deficits, and more widespread pain symptoms compared with their controls. (Naliboff, 2015)

Unfortunately, despite the positive results of the NIH PT trial, the MAPP has not pursued additional research in this area. One MAPP study sought to identify “tender points” in patients, [Chronic Fatigue] Controls and healthy controls. Tender points were found more frequently in patients than in positive and healthy controls: 55%, 14% and 10%, respectively. More tender areas were identified in the extended pelvic examination of patients regardless of gender. (Yango, 2018) While this MAPP study is helpful to promote the feasibility of “extended examination,” it does not help to distinguish between patients with hypersensitivity, possibly in the context of central sensitization, from patients with myofascial pain syndromes. As we all know, “tender points” are highly nonspecific and not to be confused with Myofascial Triggers Points.

The differential diagnosis for CPPS is extremely broad. CSS in combination with urological, psychological and neuromuscular disorders is highly prevalent and must be addressed. Physical therapy is not a panacea! However, based on the unequivocal positive results of the NIH sponsored trial in 2007-2009, the absence of any physiotherapy trials in MAPP is a travesty.

Presentation 3 - Physiotherapeutic management of male pelvic pain - current evidence

Rhonda Kotarinos

Urological chronic pelvic pain syndromes (UCPPS) impact both men and women. Chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) is the diagnosis assigned to men who are experiencing pelvic pain and lower urinary tract symptoms. Lower urinary tract symptoms can include urge, frequency, urgency, slowed/intermittent stream as well as some sexual dysfunction. These symptoms are present in the absence of a culture proven urinary tract infection or other pathology. Community based surveys establish the prevalence of CP/CPPS at 8% to 11.5% in men younger than 50 years of age.

Musculoskeletal abnormalities, which include myofascial dysfunction, are common within the CP/CPPS patient population. Anecdotal reports have indicated that manual soft tissue physical therapy can be effective managing the symptoms of CP/CPPS.

As a result of very few, if any, randomized clinical studies involving manual physical therapy approaches; the Urological Pelvic Pain Collaborative Research Network (UPPCRN) designed and completed a feasibility study. It was designed as a feasibility study because the soft tissue physical therapy techniques can be painful and there was concern as to whether patients would be willing to be randomized between two types of manual treatment. This randomized controlled clinical trial was not specifically designed to assess the superiority of one manual technique treatment over the other. Ultimately the finding was that manual physical therapy protocol had a 60% positive responder rate.

“To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks a real advance in science.” This quote by Albert Einstein describes what the UPPCRN accomplished with their feasibility study. This study expanded the definition of pelvic floor physical therapy (PFPT). No longer was PFPT just doing “Kegels”, concentric exercise or relaxing a hypertonic pelvic floor.

The manual physical therapy protocol of this study included:

- Myofascial manipulation, specifically manual trigger point release.
- Connective tissue manipulation to reflexively address the tissue changes associated with viscerosomatic/somato-visceral reflex.
- Neural manipulation to integrate neurodynamics.
- Pelvic floor neuromuscular reeducation, most often lengthening the pelvic floor to correct a pelvic floor contracture.