Multidisciplinary Evaluation and Treatment of Vulvar Disorders

The Role of Physical Therapy
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Disclosures

- None
Objectives

● Outline the role of physical therapy in the treatment of vulvar dermatological conditions
● Describe a typical pelvic floor muscle examination
● Outline evidence for various types of PT treatment
● Provide several treatment strategies for vulvar dermatological conditions and pelvic pain
● Outline use of modalities in relation to vulvar dermatological conditions
● Review several case studies
“Women with vulvodynia should be assessed for pelvic floor dysfunction... although physical therapy has been shown be to effective in treated vulvodynia, the approach is individualized, and so outcomes cannot be accurately validated or reproduced.”\textsuperscript{1}

- Vulvodynia Guideline Update, 2013

Various guidelines for treatment of vulvar dermatological conditions mention TENS, biofeedback, and perineal manual therapy as effective treatment.\textsuperscript{1, 2}
Role of Physical Therapy In Vulvar Disorders

- Goals are centered around the patient’s goals
- Aim is to make patients as functional as possible:
  - Improve sexual health & quality
  - Improve urinary and bowel function
  - Decrease pain levels
  - Improve tolerance to wearing certain clothes, sitting, traveling
  - Treatments are multi-modal and focus on several aspects of patient’s overall health and wellbeing
Why PT?

- Increased tone in pelvic floor musculature can increase chronic vulvar pain\(^3\)
- Women with vulvodynia have increased pelvic floor tone at rest, altered pelvic floor muscle coordination, levator ani instability, and less movement in pelvic floor and bladder neck when contracting muscles\(^4\)
Is PT effective?

- 54% of Clients in a multidisciplinary treatment plan for 10 weeks reported significant improvement in dyspareunia and improved sexual functioning\(^5\)
- 70-80% of participants in a randomized pilot study saw at least 30% improvement with PT or cognitive behavioral therapy\(^6\)
- In another RCT, 57% of participants saw improvement with PT, versus 21% with just global massage\(^6\)
- In a 2002 study, patients with vulvar vestibulitis were seen for PT and 72% of clients saw a significant or moderate improvement in pain with intercourse and gynecological exams\(^7\)
Other Conditions We Treat

- Pelvic/SI joint instability
- Incontinence (bladder and bowel)
- Incomplete emptying, slow stream, hesitancy
- Pelvic pain (vulvodynia, coccyx pain, etc.)
- Constipation/Bowel symptoms
- Pelvic organ prolapse
- Dyspareunia
- Perineal tears
- Post-surgical concerns
Pelvic Floor Muscle Exam

- Digital/Manual Exam with no Speculum
- Pelvic floor coordination
- Pelvic floor strength & endurance
- Skin abnormalities & visual inspection, visualization of scars
- Screening for pelvic organ prolapse
- Pelvic floor tone, muscle restriction, pain
- Symmetry and Reflexes
- ALSO:
  - Posture, breathing
  - Hip, Lumbar Scan
  - Abdominal Wall
Pelvic Floor Muscle Exam- Trigger Points

- “Muscle relaxation can diminish spasm and pain.”

\[9\]
The Trigger Point Debate
Screening of Adjacent Body Parts

Musculoskeletal Evaluation:

- Coccyx
- SIJ
- Pubic Symphysis
- Pelvis/Hips
- Spine
- Scar tissue mobility
- Abdominal Wall
- Posture
- Breathing
Treatment

“No studies report on the optimal technique and success will depend on a number of factors including the therapist, degree of patient support, and time and number of sessions”\textsuperscript{11}

Treatment

- One study noted decreased pain response to touch, decreased pelvic floor tone, improved pelvic floor/vaginal flexibility with PT treatment which included manual therapy, biofeedback, estim, dilator use, and therapeutic exercises.\(^\text{12}\)

- EAU Guidelines state, “Muscle tenderness and trigger points may be implicated as a source of pain... it is not unknown for adjacent muscles of the lower limbs and the thorax to become involved”\(^\text{9}\)
Treatment

- Individualized to each client
- Goals?

Interventions may include:

- Manual therapy
- ANS Quieting
- Physical Agents/Modalities
- Biofeedback
- Therapeutic Exercise
- Patient Education
Treatment

- “Physical Therapy and biofeedback are integral components of the multidisciplinary approach for women with vulvodynia”\(^4\)

- In a study of 35 women, 50% of participants saw complete or significant improvement in symptoms, 20% saw moderate improvement.\(^{13}\)
Triplanar Perineal Release\(^{14}\)

- Effective for release of perineal tissues secondary to scarring, tearing, history of lichens

- Goal is to work in several planes of motion (side/side, front/back, and rotational) in a direct or indirect manner to ease tissue tension
Triplanar Perineal Release
Self Perineal Release

- Shown to be effective in relaxation of superficial pelvic floor muscles\(^4\)
- Self-desensitization techniques such as insertion of finger on regular basis and self-examination with use of pressure, progressing to doing this with a partner and with a tampon/dilator led to significant improvement in sexual satisfaction\(^{15}\)
Manual Trigger Point Release
Use of TENS

- Intravaginal TENS weekly plus pelvic floor PT led to improvement in 75% of clients\textsuperscript{17}
- TENS improved sexual functioning and decreased vulvar pain.\textsuperscript{14}
- Another RCT showed significant improvement and decreased pain with intercourse with TENS.\textsuperscript{16}
Biofeedback

- Can be used to help overcome vestibulodynia and gain better control over pelvic floor musculature\(^4\)
- Recommended in both Vulvar Guidelines Update and EAU Guidelines
- With biofeedback, after 16 weeks pelvic floor muscle contractions increased by 95%, resting tone decreased by 68%, subjective pain decreased by 83%.\(^{19}\)
Biofeedback

- However, biofeedback does not inherently lengthen muscle fibers, instead manual therapy brings blood flow and oxygen that can help lengthen an overactive pelvic floor\textsuperscript{18}
Dilator Use

- In a group of 15 women, use of dilators with standard instructions used for 8 weeks improved sexual function and decreased dyspareunia\(^2^1\)
Role of Nutrition

- Nutrition may play an important role
- Increased IgG autoantibodies in 74% of women with Lichen’s Sclerosus versus 7% in controls\textsuperscript{22} ... IgG’s \textit{may} indicate a true allergy
- Vulvodynia and Irritable Bowel Syndrome Treated With an Elimination Diet: A Case Report\textsuperscript{23} (J Drummond et al. 2016)
What Info does PT need to know from MD/NP?

- Working diagnosis
- Lab workup (especially if positive) and upcoming testing
- Medication list/recent changes to medications
- Recent testing or imaging
- Does the patient have any strict precautions?
- When should the patient follow up with the doctor again?
Case 1

- 55 y/o female with 8 year history of vulvodynia described as burning/itching. Currently managed on high dose gabapentin (3700 mg/day), topical estrogen, steroid suppositories. Pain with sitting, wiping, walking.
- History of Lichen Sclerosis, bacterial vaginosus, endometriosis, and remote fall on L SIJ. Currently in menopause, no previous pregnancies
- Exam:
  - Small abraded area on L side vulva
  - Minimal ability to move perineum even with bearing down
  - Poor pelvic floor excursion
  - TTP bilaterally bulbocavernosus, obturator internus, perineal muscles, coccygeus
  - Little to no ability to recruit glute musculature
Case 1

Treatment
Case 2

- 50 y/o female with 2 year history of painful, impenetrable intercourse, increased urinary frequency and incontinence, inability to use a tampon with sensation of tampon being “blocked”. Symptoms of insidious onset but began shortly after quitting smoking
- Questionable diagnosis- Lichen’s Planus versus Pemphigus Vulgaris
- Treated with various medications, which per patient were not helpful
- PFM Exam: skin lesions on bilateral labia minora & vulva, vaginal stenosis, increased muscle restriction throughout pelvic floor and around urethra
Case 2

Treatment
References


References


References


References

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