

Pelvic Examination of Patients with Genito-Pelvic Pain/Penetration disorder
Dr Beth Shelly PT, DPT, WCS, BCB PMD

Patient Position

- Supine – lithotomy position is best
- Might need to lower leg closest to you for better reach
- Do not abduct hips initially – might need to move them during exam but want the pelvis and hips in neutral and not severe abduction
- Severe anxiety

Orientation

- 12 o'clock represents the urethra
- 6 o'clock represents the perineal body

Observe Perineal skin

- Lichen sclerosis or other skin diseases
- Scarring and other lesions
- Shaved pubic hair

Observe perineal body mobility

- Ask the patient to contract and relax the PFM:
 - Perineal elevation - PFM contraction
 - No change - possible weakness or increased PFM tone
 - Clitoral nod - downward movement of the clitoris
- Does the patient relax after a contraction
 - Fully
 - Partial, hesitant
 - Does not relax
- Ask the patient to bear down
 - Perineal descent - PFM relaxation
 - No change - possible nervousness, inability to relax PFM
 - Perineal Elevation - paradoxical contraction of PFM

Palpate external genital structures

- Focused on pain locations reported by patient and may include
 - Pubic symphysis
 - Lower abdominal muscle, scars on the lower abdominal area
 - Adductor tendons
 - Inferior pubic arch
 - Gluteals
 - Clitoral area, labia majora, minora – skin mobility scars
 - Superficial perineal muscles
 - Perineal body
 - Skin mobility around anus

- Light and deep pressure: assess all layers
- Response to light touch / sensation testing – hypersensitivity
- Compare right versus left
- Assess for tenderness, tissue thickness, asymmetry, reproduction of symptoms
- Palpation of the pudendal nerve at the pudendal canal externally

Reliability of testing (Slieker-ten Hove 2009)

Test	Intra - observer	Inter – observer
External observation of relaxation	Low	Substantial
External observation of straining	Low	Low
Palpation of pain	Substantial	Substantial
Palpation of voluntary relaxation	Substantial	Low
Palpation during straining - relaxation	Moderate	Low

Vestibule examination

- Vaginal mucosa
 - Red possibly due to inflammation
 - White due to atrophic vaginitis or lichen sclerosis
 - Look for lesions
 - Vaginal discharge
 - Urethral caruncle: a small, red papillary growth found at the urethral meatus
- Cotton swab test for provoked vestibulodynia
 - Hold the labia minora open with the left hand
 - Using the cotton end of a cotton swab dipped in lubricant or water
 - Pressing light enough to deflect 1 mm, touch the inside of the vestibule at quadrants 12-3:00, 3:00-6:00, 6:00-9:00, 9:00-12:00 in RANDOM order to avoid inflated response
 - Severe pain on light touch is positive (especially posterior 3:00 to 9:00)
 - The fourchette (6:00) is tested last as this is an area of high probability of provocation and may influence the response of other areas tested (Strauhal 2007)

Precautions and Contraindications for Internal PFM Examination

- Use caution and monitor patient response
 - Severe pelvic pain
 - History of sexual abuse
 - Decreased sensation
- Absolute contraindications
 - Active infectious lesions (eg, genital herpes)
 - Active infections of the vagina
 - Open wounds - fistula, fissure
 - Absence of patient agreement or cognitive understanding of the procedure
 - Inadequate training on the part of the PT to perform the exam

Vaginal Examination for pain (Frawley 2007, Van Alstyne 2010)

- Palpate the muscle: inside the vagina with a broad contact on the side of the finger initially
- More aggressive palpation - only if unable to reproduce symptoms
 - Finger tip
 - Snapping palpation: strum over the PFM deep to superficial
- Palpate all areas of the muscle 1:00 to 11:00 and all depths superficial to deep (Jarrell 2005)
- Sensation testing (Kavvadias 2013)
 - Tenderness / pain - myalgia (deeper palpation) versus skin (more superficial layer pain)
 - Visual analog scale (0-10)
 - Hyperalgesia – severe pain on light palpation
- PFM tone - tissue tension / thickness / resistance to pressure (Devreese 2004, Shek 2007)
 - Contractile versus non contractile – cannot tell with palpation
 - Note location and quality
 - Increased tone (hypertonus only in a patient with a neurological condition)
 - Transient increased tone - patient can relax with verbal cues
 - Spasm - pulsing increased tone
 - Trigger point (Meister 2019 – protocol for assessment, Doggweiler-Wiygul 2004, Dommerholt 2006, Lucas 2009)
 - Best reliability for subjective signs - pain, tenderness and jump sign
 - Worse for location of taught band and local twitch response
- Facial mobility and adhesions
 - Slide vaginal skin
 - Test for scar mobility and adhesions
- Ask for active contraction and bearing down
 - Elevate
 - No change
 - Descent

Internal Tissue Palpation

- Superficial and intermediate tissues inside the vagina
- Palpation of the pudendal nerve at the pudendal canal internally
- Pubococcygeus: deeper and thicker
- Iliococcygeus: bilateral and bowl-like
- Deeper structures
 - Obturator internus (OI): lateral side walls
 - Locating the coccyx
 - Coccygeus: superior to iliococcygeus and overlies sacrospinous ligament
 - Piriformis: superior to coccygeus; move cephalad along the coccyx and sacrum

References

- Devreese A, Staes F, et al. Clinical evaluation of pelvic floor muscle function in continent and incontinent women. *Neurourol and Urodynam* 2004;23(3):190-197.
- Doggweiler-Wiygul R. Urologic myofascial pain syndromes. *Current Pain and Headache Reports* 2004;8:445-451.
- Dommerholt J, Bron C, Franssen J. Myofascial trigger points: an evidence-informed review. *J of Man and Manip Ther* 2006;14(4):203-221.
- Frawley H, Bower W. Pelvic pain in Evidence based physical therapy for the pelvic floor Eds Bo, Berghmans, Morkved, Van Kampen. Elsevier Publisher Edinburgh 2007.
- Jarrell JF, et al. Consensus guidelines for the management of chronic pelvic pain. *J Obstet Gynaecol Can* 2005;27(8):781-801.
- Kavvadias R, et al. Pelvic floor muscle tenderness in asymptomatic, nulliparous women: topographical distribution and reliability of a visual analog scale. *Int Urogynecol J* 2013;24:281-286.
- Lucas N, Macaskill P, Irwig L, Moran R, Bogduk N. Reliability of Physical Examination for Diagnosis of Myofascial Trigger Points. A Systematic Review of the Literature *Clin J Pain* 2009;25:80-89
- Meister MR, Sutcliffe S, Ghetti C, Chu CM, Spitznagle T, Warren DK, Lowder JL. Development of a standardized, reproducible screening examination for assessment of pelvic floor myofascial pain. *Am J Obstet Gynecol*. 2019 Mar;220(3):255.e1-255.e9.
- Shek KL, Dietz HP. Can resting tone of the pubovisceral muscle be assessed digitally? *Int Urogyn J and Pelvic Floor Dys* 2007;18(suppl 1):S101.
- Slieker-ten Hove MCP, Pool-Goudzwaard AL, Eijkemans MJC, Steegers-Theunissen RPM, Burger CW, Vierhout ME. Face Validity and Reliability of the First Digital Assessment Scheme of Pelvic Floor Muscle Function Conform the New Standardized Terminology of the International Continence Society. *Neurourology and Urodynamics* 28:295-300 (2009)
- Strauhel MJ, Frahm J, Morrison P, et al. Vulvar Pain: a comprehensive review. *JWHPT* 2007; 31: 7-26.
- Van Alstyne LS, Harrington KL, Haskvitz EM. Physical therapist management of chronic prostatitis / chronic pelvic pain syndrome. *PTJ* 2010;90(12):1795-1806.