Pelvic Health and The LGBTQIA+ Community

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Wholam

- Graduated from Northeastern University in 2009 with DPT
- Initially began practicing in Boston area in outpatient setting, then traveling PT for 2 years and ended up back in outpatient setting in 2014 in SD
- After starting at PT Effect in 2014 I began treating pelvic health disorders and have been specializing in this area for the past 5.5 years



What is Pelvic Floor PT?

- Treatment of the pelvic floor muscle group, which is responsible for a variety of functions. These muscles support the pelvic organs, assist in bowel and bladder control, and contribute to sexual arousal and orgasm.
- Referral to pelvic floor PT can include various diagnosis such as:
 - Urinary incontinence/urgency/frequency
 - Pelvic pain
 - Painful intercourse
 - Premature/painful ejaculation
 - Constipation

Common misconceptions regarding pelvic floors and PT

- NOT just for people with vulvas
- Do not have to have given birth to have a pelvic floor disorder
- It is NEVER normal to experience urine leakage
- Sex should never be painful (unless that is the goal and it is consentual)
- Involves more than just internal assessments and internal work
- Is not just Kegals!



Functions of the Pelvic Floor

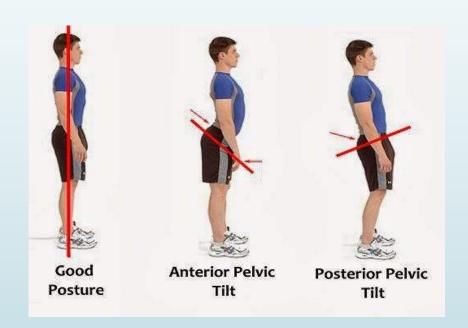
- Pelvic floor functions as part of your core but is also responsible for:
 - Controlling bowel and bladder functions
 - Postural support
 - Breathing mechanics
 - Sexual functioning/pleasure (orgasm)
 - Aiding in lymphatic system regulation- "sub pump"

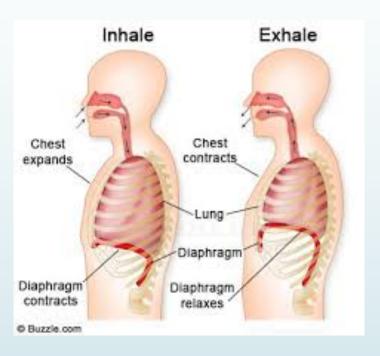
Controlling Bowel and Bladder

- Sphincter muscles allow for control over both urination and defecation
 - These muscles have both smooth muscle and striated muscle allowing for both voluntary and involuntary control
 - Can be impacted by trauma or CNS issues

Breathing and Posture

- Works along with diaphragm, transverse abdominis and multifidus to aid in breathing mechanics
- Provides support from below to aid in overall postural alignment



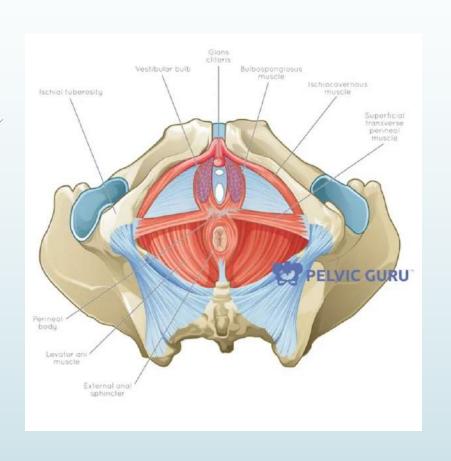


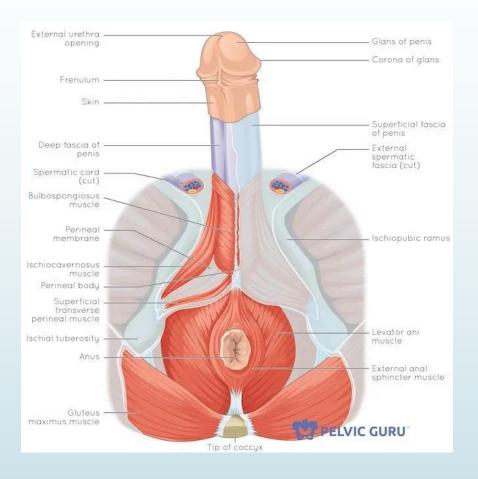
Orgasm

- During orgasm there is a pelvic floor contraction
- Important for both people with penises and people with vulvas



Anatomy of Pelvic Floor



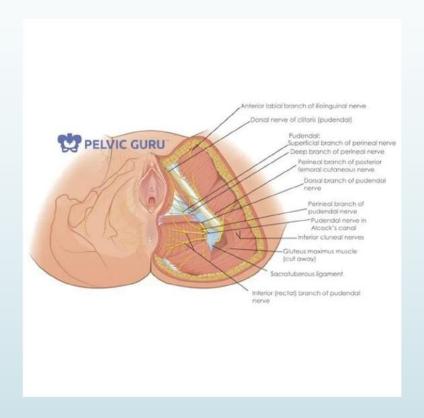


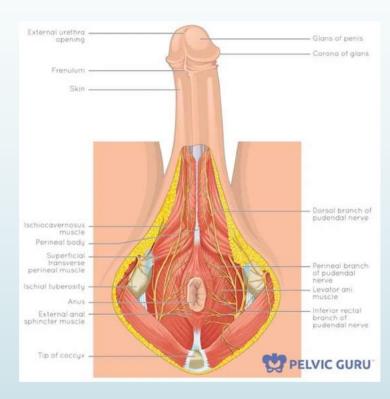
Nervous System and the Pelvic Floor

- Innervated by both Somatic and Autonoimic nervous systems
- Has both smooth muscle and striated muscle so it is both under voluntary and involuntary control

Somatic Nerves

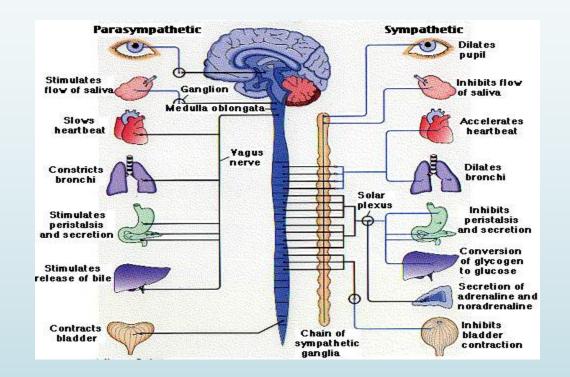
Sensory and motor nerves of the pelvis





Autonomic Nervous System and Pelvic Floor

- Constant balance of sympathetic and parasympathetic
 - "Fight or Flight" vs "Rest and Digest"
- Vagus nerve plays a large part in parasympathetic effect on pelvic floor as it allows for slowing of heat beat and relaxation

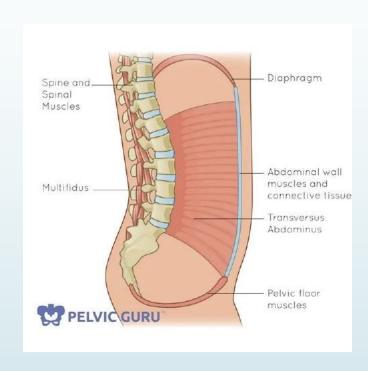


Autonomic Nervous System and Pelvic floor

- A study in Journal of Urology from 2007
 - ► Looking of the role of autonomic nervous system on men with chronic pelvic pain
 - Used HR variability and BP
 - Results: the heart rate variability and blood pressure changes suggest altered autonomic nervous system responses in men with the chronic pelvic pain syndrome (1)

Breathing, Your "core", and Pelvic Floor

- Diaphragmatic breathing:
 - Conserves energy
 - Improves O2
 - Allows for natural relaxation/contraction of pelvic floor
 - Trains "core muscles" to work together
 - Reduces HR and can stimulate vagus nerve/parasympathetic nervous system



Pelvic Floor Disorders and Mental Health

- High correlation with PFD(Pelvic Floor Disorders) and stress, anxiety, trauma, and abuse
- Connection with autonomic nervous system and pelvic floor muscles

Trauma/Abuse

- Medical community as a whole focuses mostly on heterosexual women as intimate partner violence
- A study in the International Journal of STD & AIDS
 - Of 532 men, 33.9% experienced and 16.3% reported carrying out negative behaviour.(2)
- For females in the Journal of Obstetrics and Gynecology
 - The risk may be highest in bisexual women (61%) compared with lesbian women (44%) and heterosexual women (35%), as reported in the 2010 National Intimate Partner and Sexual Violence Survey.
 - Rates of some form of sexual violence were also higher in bisexual and lesbian women than in heterosexual women, with 46% of bisexual women and 13% of lesbian women reporting rape in their lifetime(3)
- Study done in 2011 from the Journal of General Internal Medicine looked at intimate partner violence within LGBTQ community
 - The National Violence Against Women (NVAW) survey found that 21.5% of men and 35.4% of women reporting a history of cohabitation with a same-sex partner had experienced physical abuse in their lifetimes
 - The corresponding rates for men and women with a history of only opposite-sex cohabitation were 7.1% and 20.4%, respectively(4)

Anxiety, Depression and Suicidal Thoughts

- Journal of Sex & Marital Therapy
 - A study by Santerre-Baillargeon et al found adolescent girls who reported being victims of sexual abuse reported being more anxious, which in turn increased their risk of reporting genito-pelvic pain(5)
- Study in Journal of Urology
 - Looked at relationship between lower urinary tract symptoms and depression/suicidal ideation in 2,890 men from 2005-2006 and 2007-2008
 - A significant relationship was observed between lower urinary tract symptoms and depression/suicidal ideation(6)

Abdominal or Pelvic Surgeries

 Pelvic or abdominal Surgeries can effect support of pelvic floor and associated organs so following any pelvic/abdominal surgery why not refer to PT regardless of how involved of a procedure it may be



Abdominal Surgeries

- These can include anything from appendectomy, cholecystectomy, hernia repairs, cesarean section, intentional surgeries
- Significant amount of scar tissue and fascial restrictions even from laparoscopic surgeries
- Study by Gupta et al in 2011
 - Found 15-30% chance of developing chronic post surgical pain following abdominal/pelvic surgeries
 - Everything from vasectomy to hysterectomy (7)
- Systematic review by Ten Broek 2013 in British Medical Journal looked at 196 eligible studies to determine possibility of small bowel obstruction due to adhesions following abdominal surgeries as well as fertility rate following abdominal surgeries
 - While risk was only 2.5% for re-operation, 56% of small bowel obstructions requiring surgery were related to adhesions
 - Pregnancy rate was only 50% following surgery for inflammatory bowl disease vs 82% for medical management (which can include PT!)
 - Generalized infertility was stated at 23% (8)

Prostatectomy

- People with prostates have a bit of an advantage for avoiding urinary incontinence, however following prostatectomies that can change
 - National Association for Continence reports that estimated 6-8% are incontinent a year post op, however rates are likely higher
 - Scott et al in Dec 2019 looked at individualized PFPT programs and effect on outcomes
 - 98/136 patients were found to have mixed overactive/underactive PFM and were treated with relaxation followed by strengthening vs "kegals alone"
 - Decrease in : pad usage per day, pain and increase in PFM strength(9)

Hysterectomy

- Partial Hysterectomy vs Total hysterectomy vs Radical
 - Partial: removes uterus and possibly part of cervix
 - Total: removes not only uterus but also cervix
 - Radical: usually due to CA- removes uterus, cervix, fallopian tubes, ovaries and surrounding tissues
 - This removes a large amount of ligamentous stability for the pelvis
 - Overtime- unstable pelvis, poor muscular control etc can lead to pelvic pain, pelvic organ prolapse or incontinence
 - No long term studies looking at outcomes and pelvic floor disorders following hysterectomy

Hormones and Pelvic Floor Disorders

- Following hysterectomy- forced menopause can cause significant pelvic floor issues due to severe reduction in hormones
- ► For people with vulvas- testosterone treatment can cause vaginal atrophy due to decrease in estrogen levels- forced menopause
- Birth control or acne medication (spironolactone) which is an androgen blocker- both will decrease testosterone and effect vulvar tissue due to lack of free T
- Signs and symptoms of hormonal imbalance
 - urinary urgency/frequency/burning
 - urinary incontinence
 - thinning of vulvar tissue- increased sensitivity and dryness
 - painful penetration (penetrative intercourse, tampon use, speculum exams)/pelvic pain

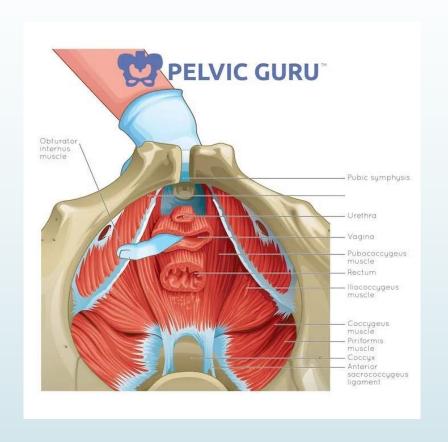
What PT Treatment Can Include

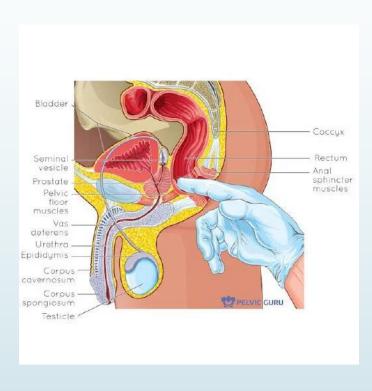
- Important to remember the connection to emotional/physical trauma and PFD
- 25% trans people delay getting medical care due to poor experiences, likely higher percentage when it comes to sexual/genital health
- Not to just focus on the physical but work in the sympathetic downtraining, relaxation to aid in reduction of physical symptoms





Manual Therapy





Manual Therapy cont.

- Focus on soft tissue, fascial restrictions, scar tissue if present
 - Chronic prostatitis/chronic pelvic pain syndrome
 - Case Study in 2010 in journal of Physical Therapy showed reduction in pain and improvement in quality of life/sexual function for 2 men who failed tx with medications (10)
 - Urinary urgency and frequency problems
 - Study in 2015 from the Journal of Female pelvic medicine and reconstructive surgery
 - 1-2 x/wk for 10 weeks- 31 completed and 62% reported they were "much better" or "very much better" on Patient Global Impression of Improvement
 - Pelvic floor distress inventory short form-20 scores decreased from median of 79.2 to 50.0
 - The PFPT with myofasical release techniques improves urinary symptoms while avoiding medications and more invasive therapies(11)

Where to go for more info...

- Con ed classes people to follow:
 - Herman and Wallace Institute
 - APTA
 - Medbridge
 - Sarah Duvall –postpartum rehab/exercise
 - The Pelvic Guru
 - The Vagina Whisperer
 - My Pelvic Floor Muscles
 - Vino and Vulvas

- Books to read:
 - The Interstitial Cystitis Solution-Nicole Cozean
 - Pelvic Pain Explained- Stephanie Prendergast
 - Heal Pelvic Pain- Amy Stein
 - Headache in the Pelvis- David Wise



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