

# Integrating Pelvic Floor Considerations in Hip Evaluations:

A Comprehensive Approach for  
Orthopedic Surgeons

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# AGENDA

- UNDERSTAND THE ANATOMY AND FUNCTION OF THE PELVIC FLOOR AND ITS RELEVANCE IN DIFFERENTIAL DIAGNOSIS DURING HIP EVALUATIONS.
- IDENTIFY OVERLAPPING SYMPTOMS BETWEEN HIP AND PELVIC FLOOR DYSFUNCTIONS.
- UNDERSTAND PAST MEDICAL HISTORY AND OTHER SUBJECTIVE CUES THAT MAY SIGNAL PELVIC FLOOR INVOLVEMENT.
- DEVELOP SKILLS IN MOTIVATIONAL INTERVIEWING TO INFORM BETTER PATIENT OUTCOMES IN PELVIC FLOOR THERAPY.
- EXPLORE EFFECTIVE STRATEGIES FOR COLLABORATION WITH PELVIC FLOOR SPECIALISTS TO ENHANCE PATIENT CARE.

# DISCLOSURES

I have no relevant financial relationships with ineligible companies to disclose.



# THE RELEVANCE OF PF

**38% WILL ADDRESS PF  
WITH A HEALTHCARE  
PROVIDER AND IT CAN  
TAKE 6 YEARS TO  
DISCUSS WITH A  
PROVIDER.**



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# BARRIERS TO **FITNESS**

- 2.64 x more likely to be insufficiently active due to severe UI
- Many women see it as a barrier to exercise.
- Low levels of activity in older women resulted due to UI
- 70.3 percent of women with UI are sedentary.
- Severe pelvic floor symptoms are correlated with increase in depression



# ORTHOPEDIC IMPLICATIONS OF INACTIVITY

- INSUFFICIENT STRENGTH TRAINING IN REHAB PROTOCOLS
- INADEQUATE IMBIBITION OF JOINTS
- OSSEOUS BONE DENSITY REDUCTION
- MUSCLE MASS FOR JOINT PROTECTION REDUCED
- CARDIOVASCULAR HEALTH COMPROMISED



# PAST-MEDICAL HISTORY

## Age

- 55 percent of women over 65 have UI

## Birth History/Trauma:

- One vaginal delivery increases risk of POP by 4-fold. 2 deliveries- 8.4 fold
- Pelvic Pain has high incidence of abuse and trauma

## Obstetric Factors

- Pelvic Floor Dysfunction Increases by 23 % after 95 minutes of pushing phase.
  - Pudendal Nerve Traction Occurs in Prolonged Deliveries
- Instrument-Assisted Delivery
  - Forceps> Vacuum Assisted Deliveries compromise the PF.
- Grade of Tearing in Delivery Matches the Amount of Anatomical Structures Involved

## Pulmonary Function:

- Strong association of breathing, COPD, asthma, etc and continence disorders with low back pain.

## Post-Surgical Considerations:

- Up to 40 percent of men after prostatectomy have urinary leakage.
- Hysterectomy





# PAST-MEDICAL HISTORY

Leaking as a younger nulliparous athlete has a strong predictor of urinary incontinence later in life.

80 percent of elite athletes may experience UI during sporting activities (50-80 percent)

- Increased incidence with Gymnastics, Ballet, Track and Field, Ball Sports





# SUBJECTIVE CUES OF PELVIC FLOOR DYSFUNCTION

## Orthopedic Subjective Reportings

- Tailbone pain
- Rectal Pressure
- Abdominal Pain
- Testicular/Penile Pain
- Pain with sitting



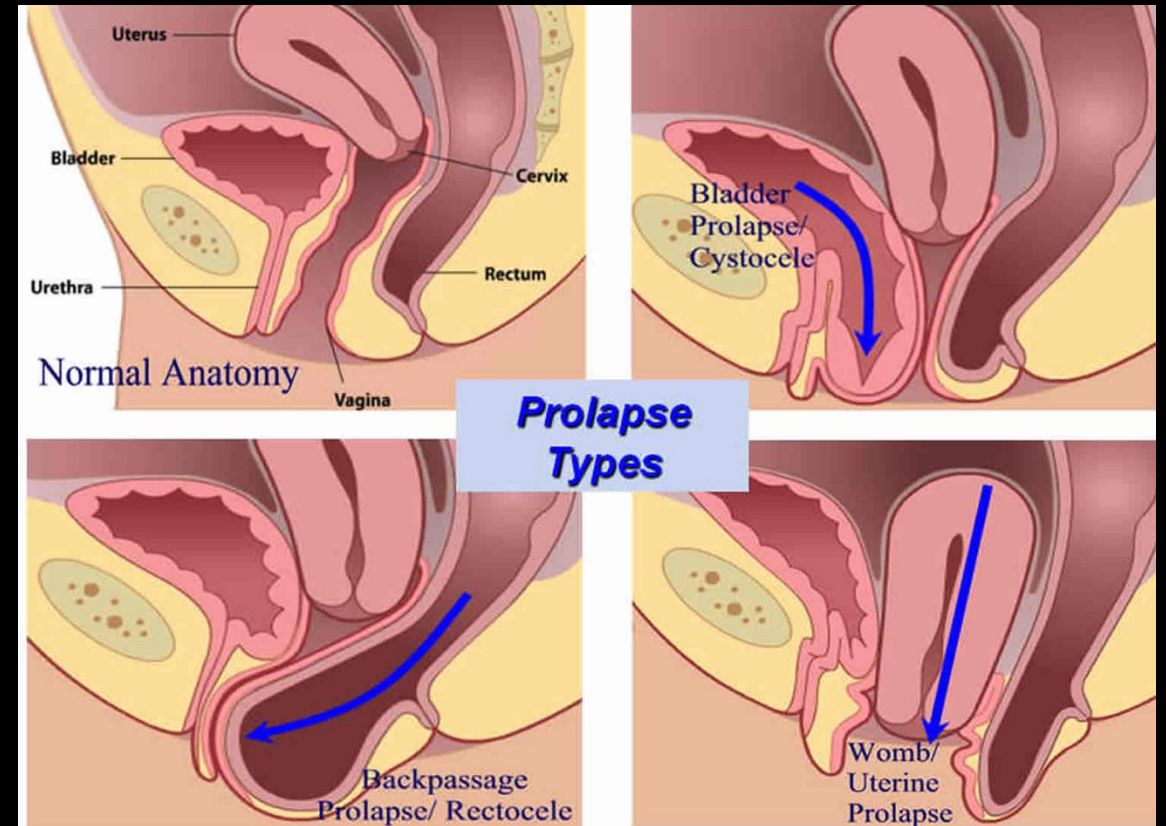
61% of those with pelvic pain have no “diagnosis” and it can occur across genders

## Urologic, Gynecologic and Colorectal Subjective Reportings

- Tampon use painful
- Pain with gynecology exams
- Constipation
- Difficulty urinating/urinary symptoms
- Urinary Frequency
- Incontinence
- Sexual Dysfunction
- Pain with Intercourse
- UTI-like symptoms (cultured negative)
  - Chronic Non-Bacterial Prostatitis

# SUBJECTIVE CUES OF PELVIC ORGAN PROLAPSE

- Ache in the lumbar spine, worsens throughout the day
- Symptoms provoked with increased intraabdominal pressure
- Reducing gravity improves symptomatology
- May not disclose:
  - Bulge/heaviness sensation
  - Double Voiding
  - Incontinence
  - Worse during menstrual cycle
  - Difficulty emptying bladder
  - Splinting during bowel movements
  - Infection, discharge, and bleeding



# Objective Cues of Pelvic Floor Dysfunction

## Posture:

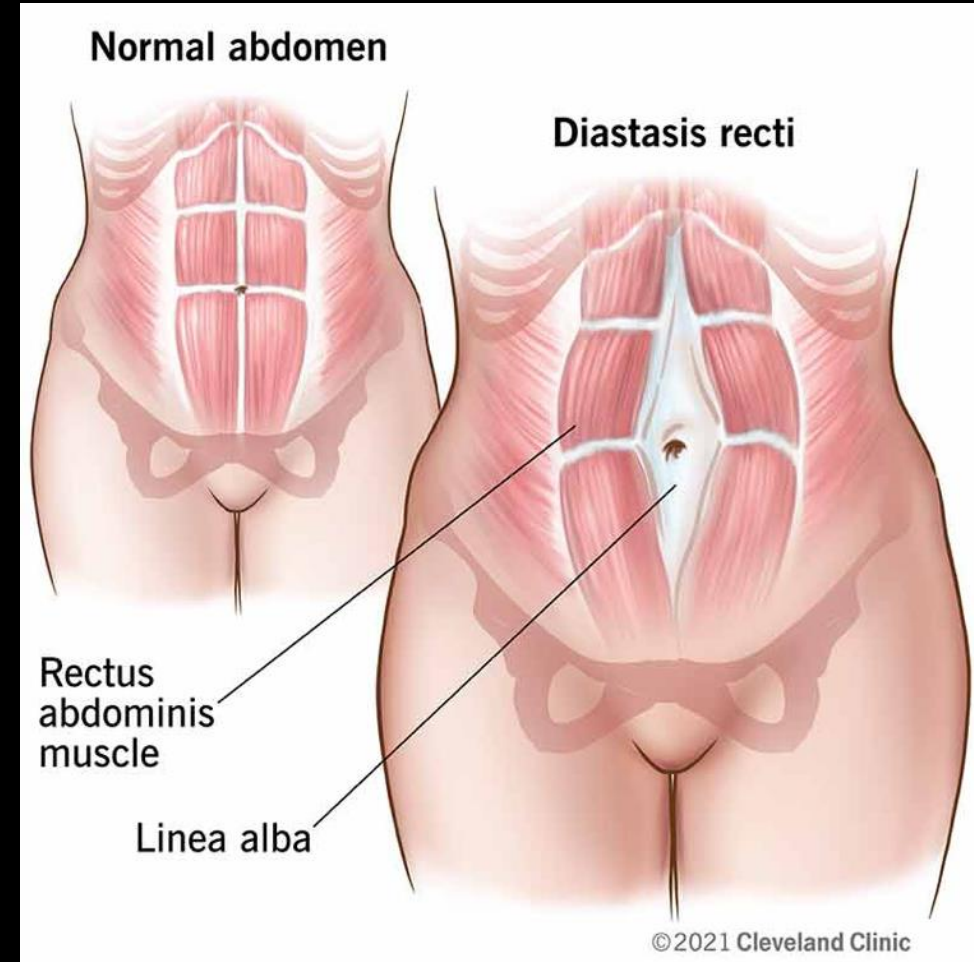
- Thoracic kyphosis increases the risk of pelvic organ prolapse

## Abdominal Tone:

- 66 percent of women with an interrecti distance have at least one pelvic floor support related dysfunction (UI, FI, POP)

## Palpation Tenderness

- Medial to the ischial tuberosity may find discomfort or reproduce symptoms





A woman with her hair in a bun, wearing a grey and black camouflage-patterned athletic top and leggings, is captured in a running pose on a paved path. She is positioned on the left side of the frame, with a vibrant teal wall in the background. The right side of the image features a black background with white and yellow text.

# MOTIVATIONAL INTERVIEWING IN EXAMINATION

Research shows...

Some of my clients say...

What we generally recommend is...

What would be the advantage to **NOT** addressing your  
\_\_\_\_\_ (insert incontinence, sexual dysfunction, pelvic pain,  
constipation...

# The Lumbopelvic-Hip Complex

- Stabilization Role of the Lumbopelvic Hip Complex
- Hip and Pelvic Floor can be correlated
  - Concomitant pelvic floor pain
- Core and Pelvic Floor Control Essential for Hip PT rehab

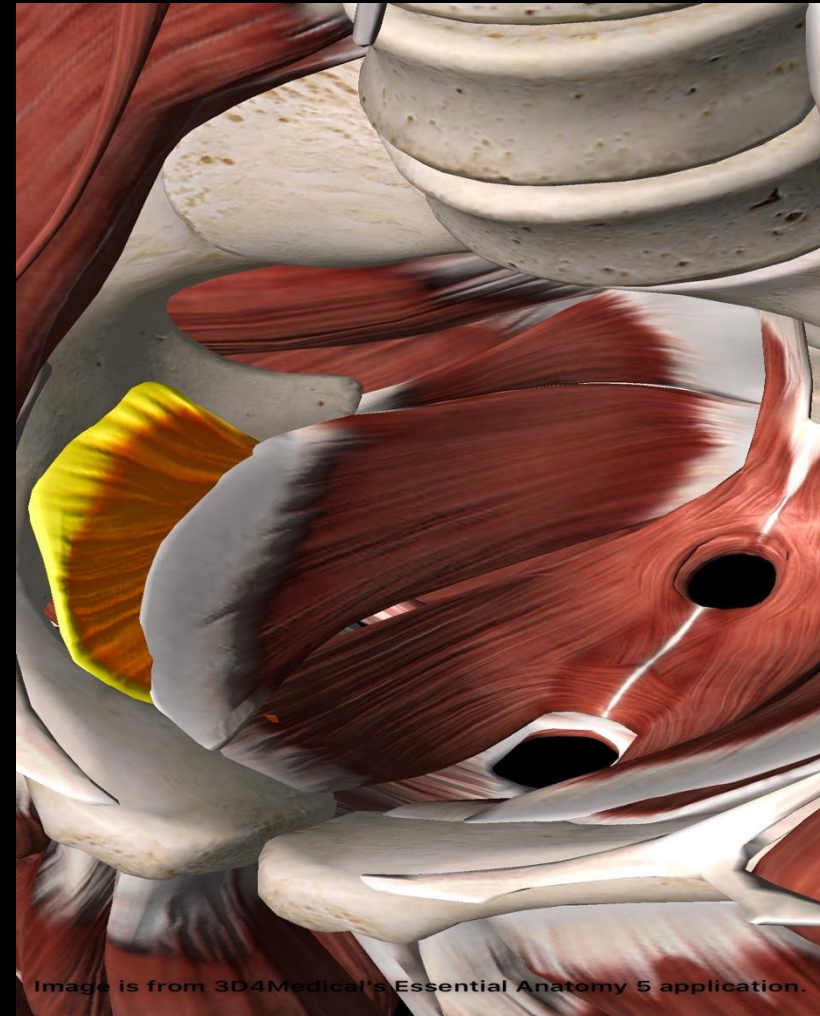
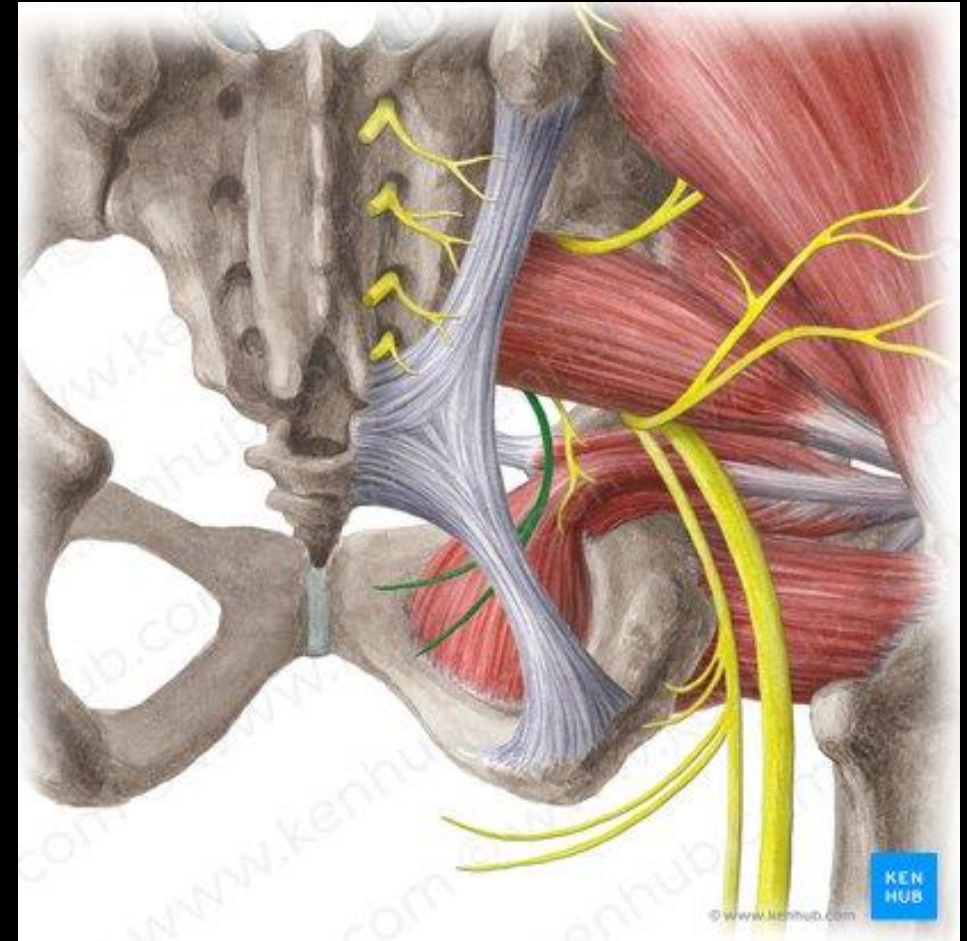


Image is from 3D4Medical's Essential Anatomy 5 application.



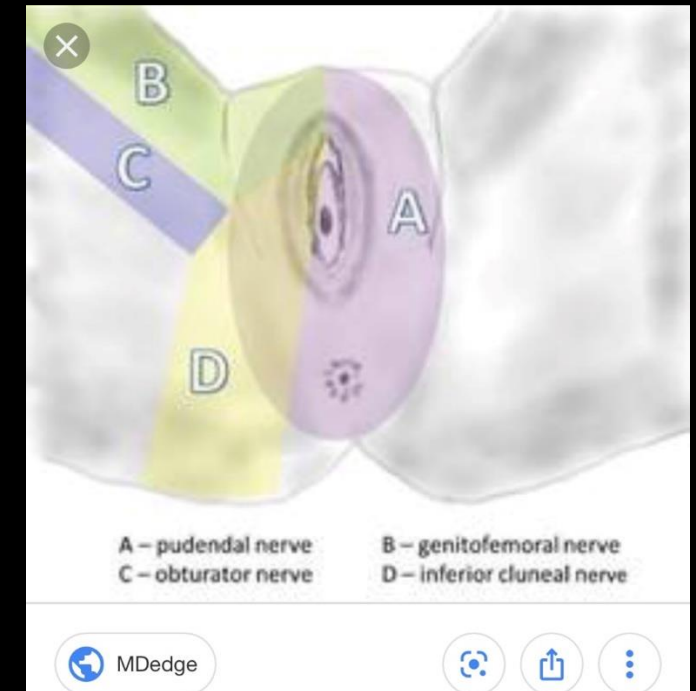
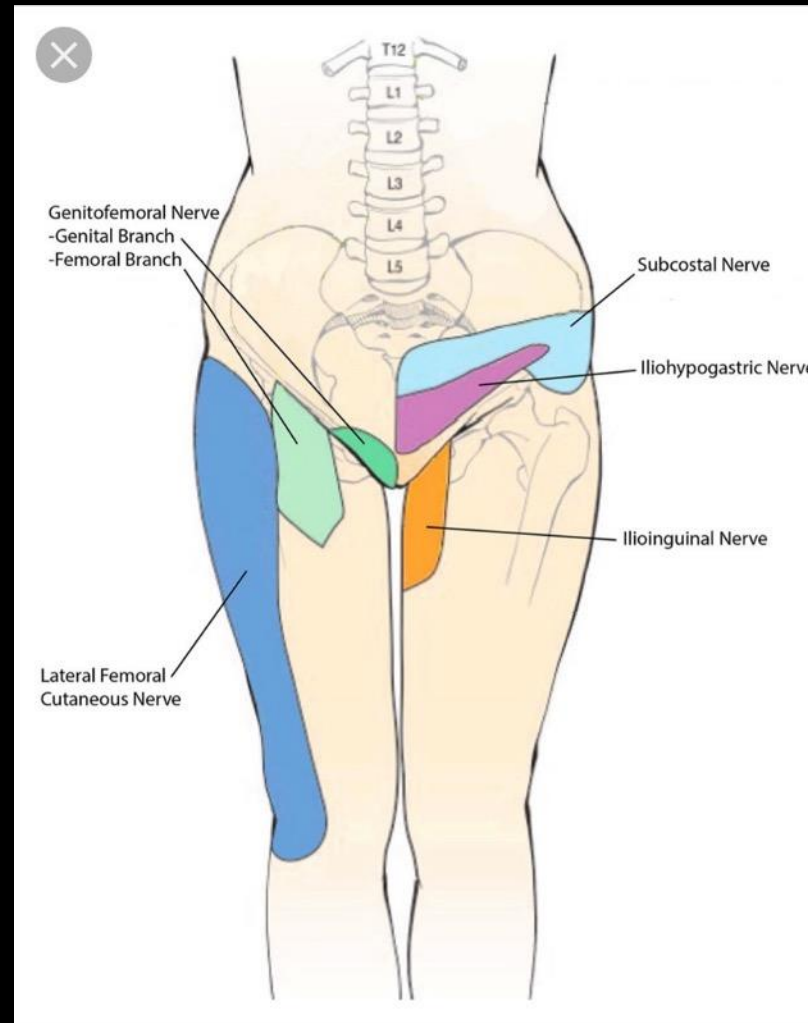
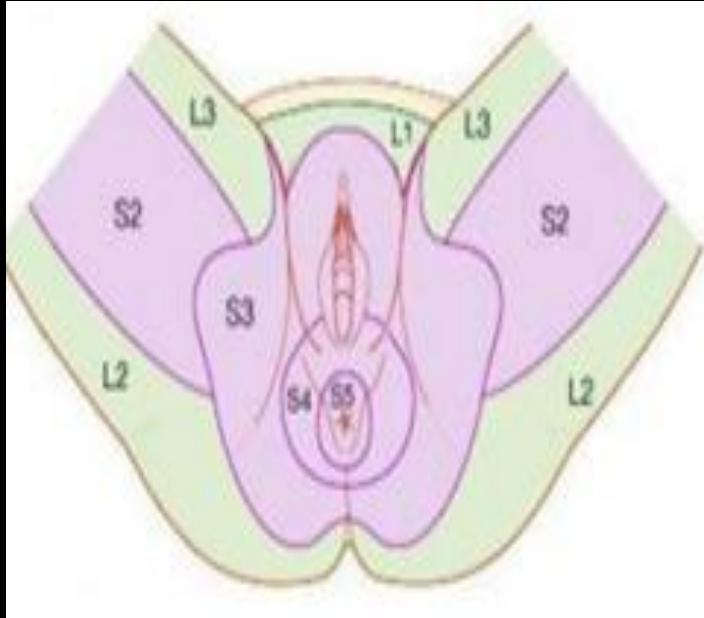
# Assessment From a Pelvic Floor PT View

- Evaluation Orthopedic of Bones and Muscles
  - Core
  - Hip
  - Lumbar Spine
  - Thoracic Spine
  - Abdominal
- Intravaginal and Intrarectal Muscular Examination
  - Dermatologic Screen for Referral
- Biofeedback
- Nervous System/Dermatomes/Peripheral Nerve Patterns
- Rehabilitative Ultrasound Imaging
- Psychosocial Factors
- Breathing
- Medical Differential Diagnosis
- PUT THE WHOLE PICTURE TOGETHER!





# Peripheral N. and Dermatomes



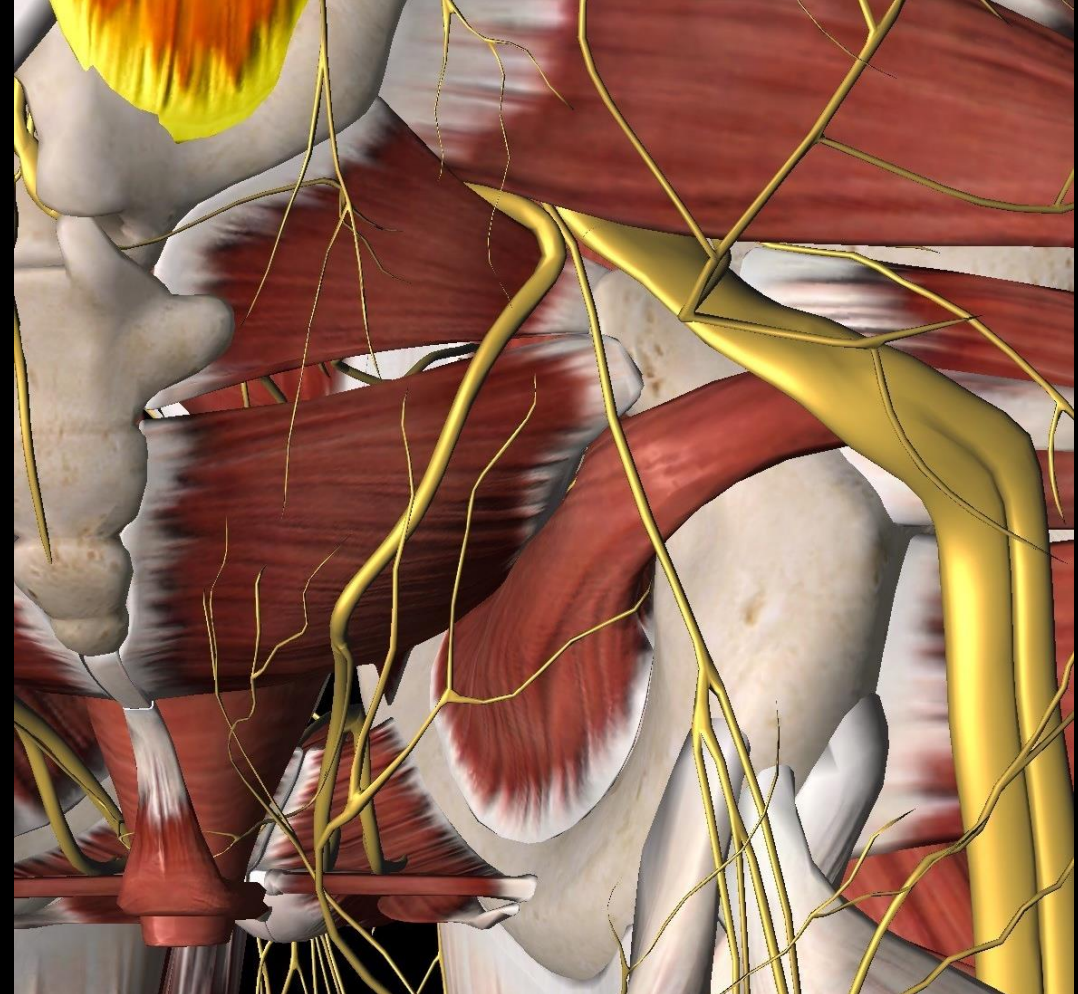
# Pudendal Nerve Irritation

## Subjective MOI:

- Prolonged sitting and sitting provokes symptoms
- Cycling, squatting exercises, horseback riding
- Chronic Constipation
- Prolonged Pushing in Labor
- Surgical History of Prostatectomy/Radiation
- Previous Fracture in the Pelvis
- Athletes
  - Longer Ischial Spine
- Hysterectomy with Sacrospinous Fixation

## Subjective Symptoms:

- 3 Branches to Pudendal Nerve
  - Rectum, Perineum, Dorsal Branch to the Penis/Clitoris
  - Pins and Needles in the Perineum or Posterior Gluteals





# BRENNAND ET AL 2018

## CANADIAN STUDY

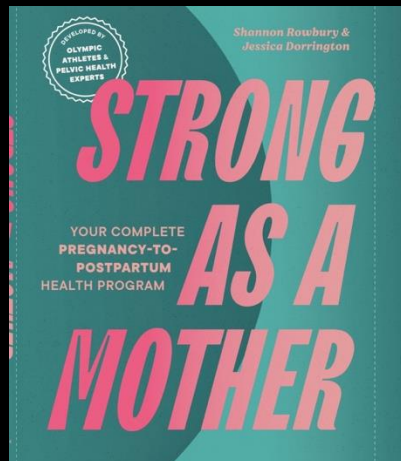
- Yet, 88.1% would like to explore treatment
  - 84.6% PFPT
  - 63.5% Pessary
  - 63.5% Surgery



# Q & A



FREE  
EXERCISE  
SERVICES



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