APTA KY Annual Conference September 9, 2023

# More than just for moms!

## We have no disclosures.

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# Objectives

- Identify which patient populations can benefit from pelvic health services.
- 2. Review high level evidence for pelvic health physical therapy.
- Provide case-based examples of pelvic health physical therapy.



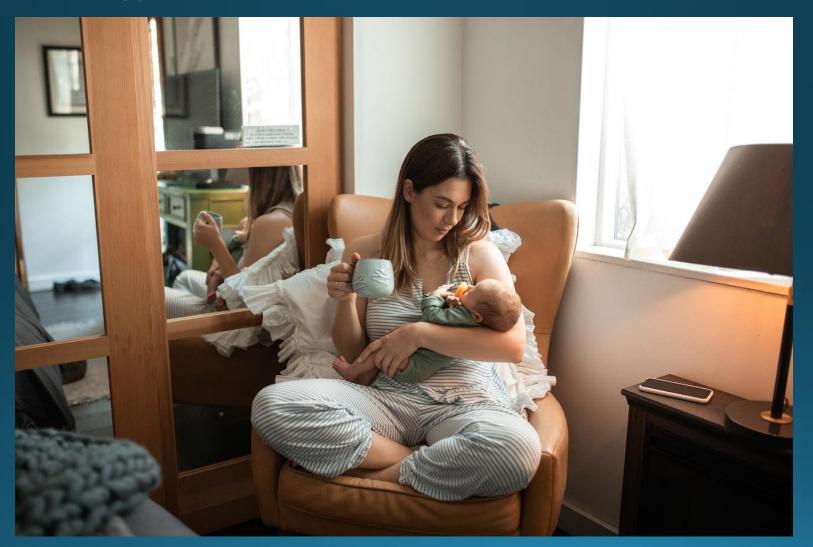




When we say pelvic health physical therapy, who comes to mind?

## Pelvic Health for New Moms

(Berg-Poppe 2022, Gluppe 2021, Gonzales 2021, Wu 2018)



# Orthopedic Conditions

(Chia 2022, Foster 2021, Hartigan 2019, Dufour 2018, Stickler 2016)





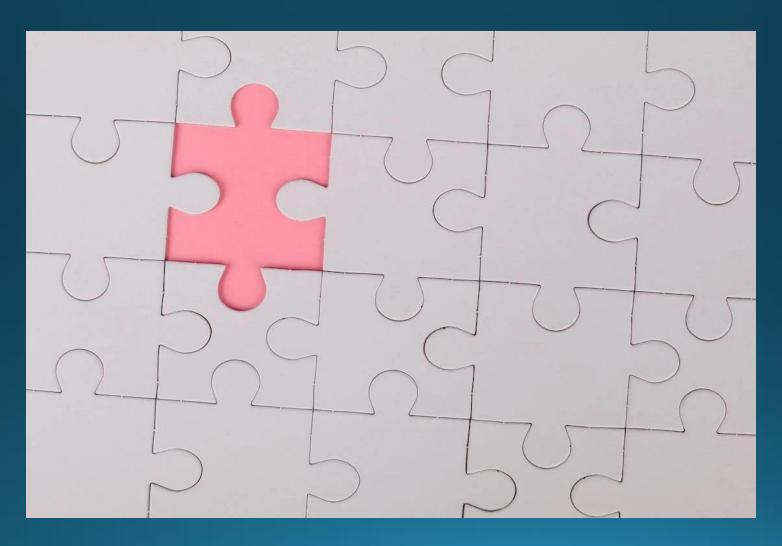
# Who else could benefit?



# Systems Review

- Gastrointestinal
- Urologic
- Reproductive
- Endocrine
- Connective tissue
- Cardiopulmonary
- Neurologic
- Autonomic nervous system

# Missing piece?





# Case Study 1

PT's Role in Urinary Dysfunction and Chronic Pelvic Pain

Frequency Retention Urgency Urinary Pelvic Floor System Dysfunction Overactive Incontinence Bladder **Interstitial Cystitis** 

# IC/PBS Definition

 "An <u>unpleasant sensation</u> (pain, pressure, discomfort) perceived to be related to the urinary bladder, associated with <u>lower urinary tract</u> symptoms of more than six weeks duration, in the <u>absence of infection</u> or other identifiable causes." (Clemens 2022)

# American Urological Association (Clemens 2022)

Appropriate manual physical therapy techniques should be offered to patients who present with pelvic floor tenderness. Pelvic floor strengthening exercises (e.g., Kegel exercises) should be avoided. Standard (Evidence Strength: Grade A)

# Case Description

- Chronic pelvic and abdominal pain
- Recurrent yeast and UTI
- Urinary urgency, frequency, nocturia
- Constipation
- Pain aggravated by diet, strenuous activity, sitting, sex, new bath products, squatting/bending
- Pain, hypomobility at thoracolumbar junction and tenderness lumbopelvic muscles
- Trace pelvic floor muscle contraction





# Education (Garzon 2020, Clemens 2022)



BLADDER IRRITANTS



CONSTIPATION

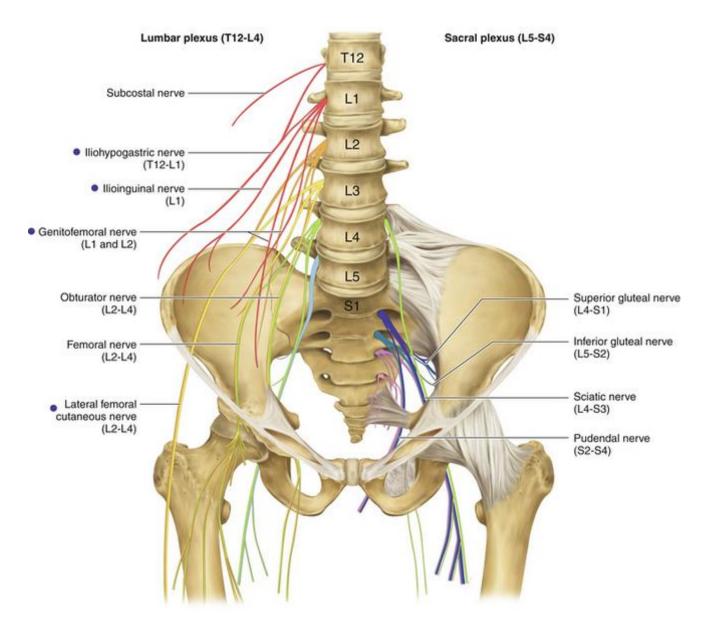


PAIN EDUCATION



STRESS REDUCTION

#### Lumbar Plexus



https://clinicalgate.com/ilioinguinal-iliohypogastric-and-genitofemoral-nerves-and-lateral-cutaneous-nerve-of-the-thigh/

#### Garzon 2020













Images from Medbridge

#### Treatment

(Bandara 2022, Garzon 2020, Ghavidel-Sardsahra 2022, van Reijn-Baggen 2022)



## Outcomes







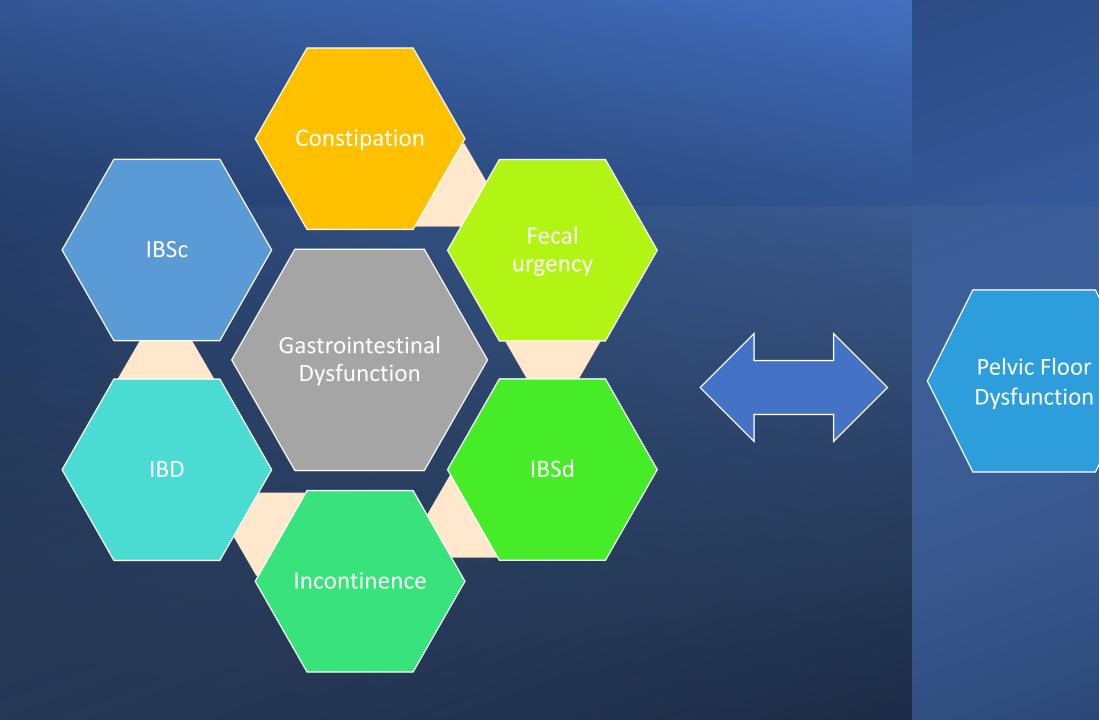
10 points improvement on PFIQ

Decreased pain and nocturia

New tools to manage flare ups

# Case Study 2

PT's Role in GI Dysfunction





# Functional Constipation in Adults

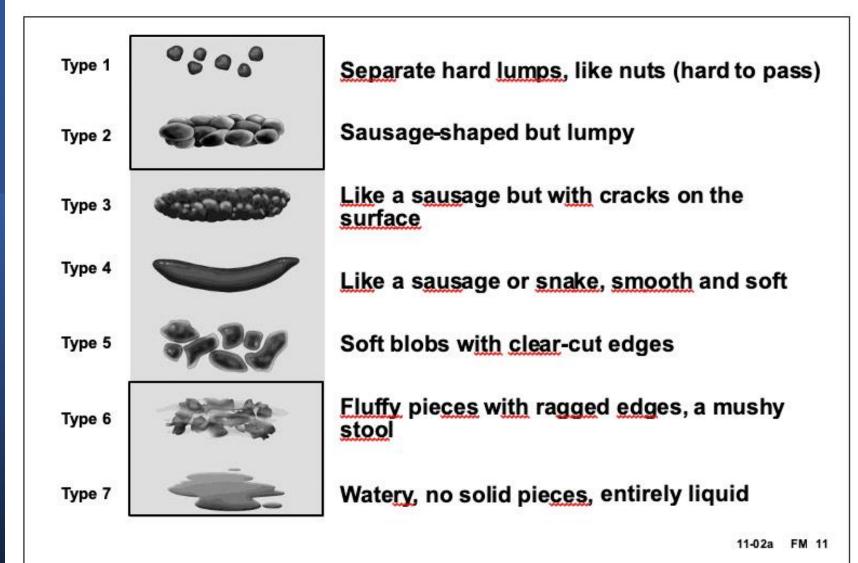
- 63million in North America
- \$1.1 million in hospitalizations per year
- \$178 million in Rx costs (\$2527/pp per year)
- Risk factors: increased age, female gender, race, lower socioeconomic status, lower parental education rates, increased stressful events in life, decreased physical activity, h/o depression, h/o sexual abuse

#### Rome IV Diagnostic Criteria

- Straining (25% or greater)
- Hard lumpy stool (Bristol stool scale 1-3)
- Sensation of incomplete evacuation (25% or greater)
- Sensation of anorectal obstruction (25% or greater)
- Manual maneuvers to facilitate BM (25% or greater)
- <3 BM/week</p>
- Rarely having loose stool (without laxative assistance)
- Insufficient evidence for IBS



#### Bristol Stool Scale





#### In the Clinic...

- 38 yo fm self referred d/t chronic constipation
  - Pt is 5 years s/p umbilical hernia repair and 2 years s/p hysterectomy.
  - Other remarkable abdominal surgeries: appe/chole/cesareanx2
  - Onset: 5 years prior, after umbilical hernia repair
  - Significant h/o attempted pharmaceutical management
  - BM 1 day/week after enema
- Current pharmaceutical "management": Weekend laxatives + enema
- Significant h/o of attempted pharmaceutical management
- CSS: 23/30

Agachan F, Chen T, Pfeifer J, Reissman P, Wexner SD. A constipation scoring system to simplify evaluation and management of constipated patients. Dis Colon Rectum. 1996 Jun;39(6):681-5. doi: 10.1007/BF02056950. PMID: 8646957.

Picture: Adobe stock. Accessed September 1, 2023.

# Physical Therapy Management of Functional Constipation in Adults - CPG

#### **Anorectal Manometry**

Evidence Quality: A

Recommendation Strength: Strong

"Anorectal manometry biofeedback training allows a safe treatment alternative and may be a good option to avoid more invasive medical and surgical interventions".



# Physical Therapy Management of Functional Constipation in Adults - CPG

#### <u>Manual Therapy – Abdominal Massage</u>

Evidence Quality: A

Recommendation Strength: Strong

"Clinicians should consider manual therapy including abdominal massage for short-term effects..."

15 to 30 minutes4 to 8 weeks30 to 60 minutes after a meal5 to 7 days per week

"Statistically significant improvements in all measures except for laxative consumption were demonstrated with no adverse effects".



#### Behavioral Modifications









**Activity mods** 

ADLs

Purposeful movement

Exercise



Dietary mods

Fiber

Water/Fluids

Caloric Intake



**Bowel Schedule** 

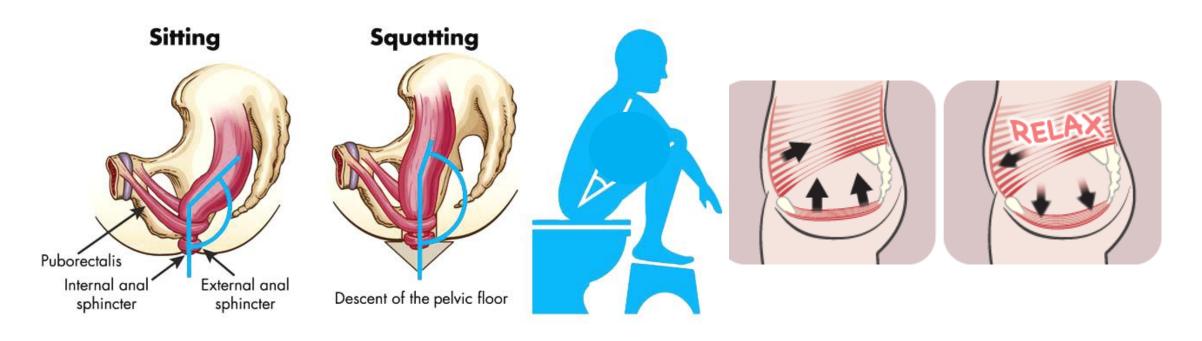
Sitting after meal(s)

Consistent

Mechanics

#### Bowel Movement Biomechanics

#### Proper angles and controlled utilization of IAP



#### Back in the Clinic...



**Treatment Interventions:** 



Behavioral modifications

Bowel schedule

Water intake soda intake
Increased caloric intake

Positioning for BM



**Manual Therapy** 

Bowel massage Abdominal Scar Mobilization Family member training to assist between sessions



Synergy of Diaphragm and PF

With intrarectal sensory feedback



## Outcomes



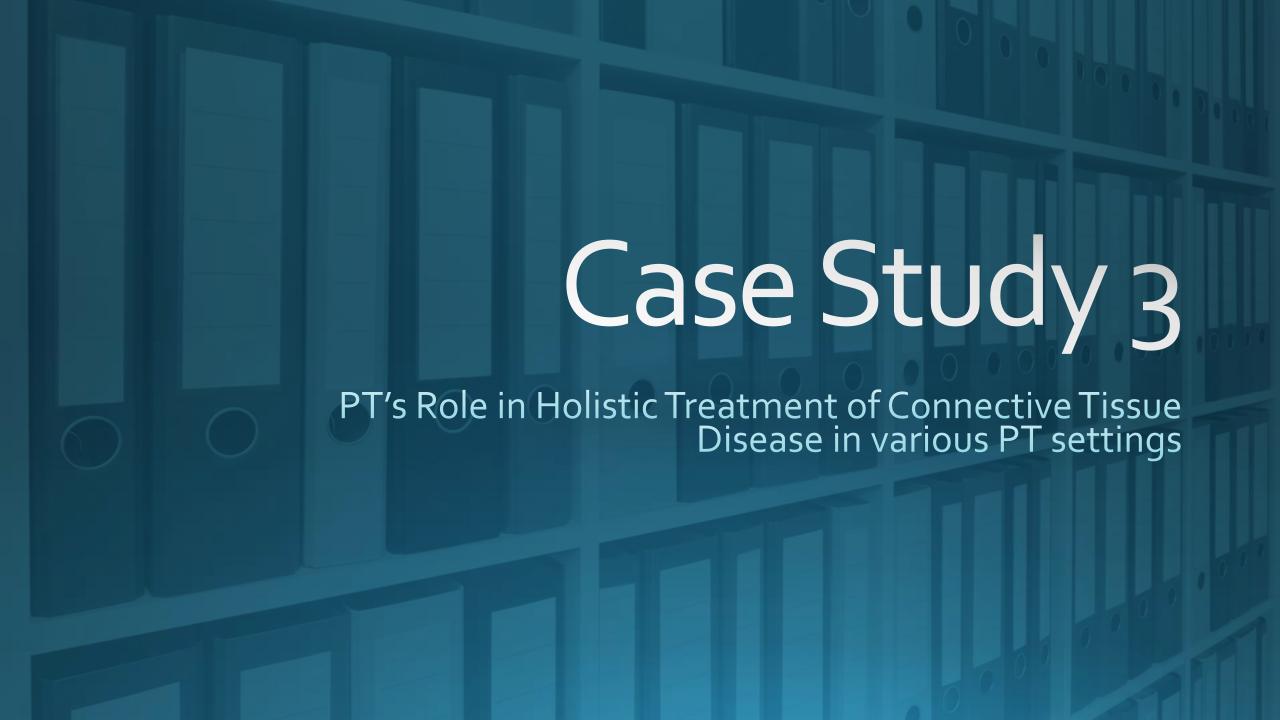
13 points improvement on CSS



BM every other day



Up to 50 oz water per day and down to 2 cokes per day



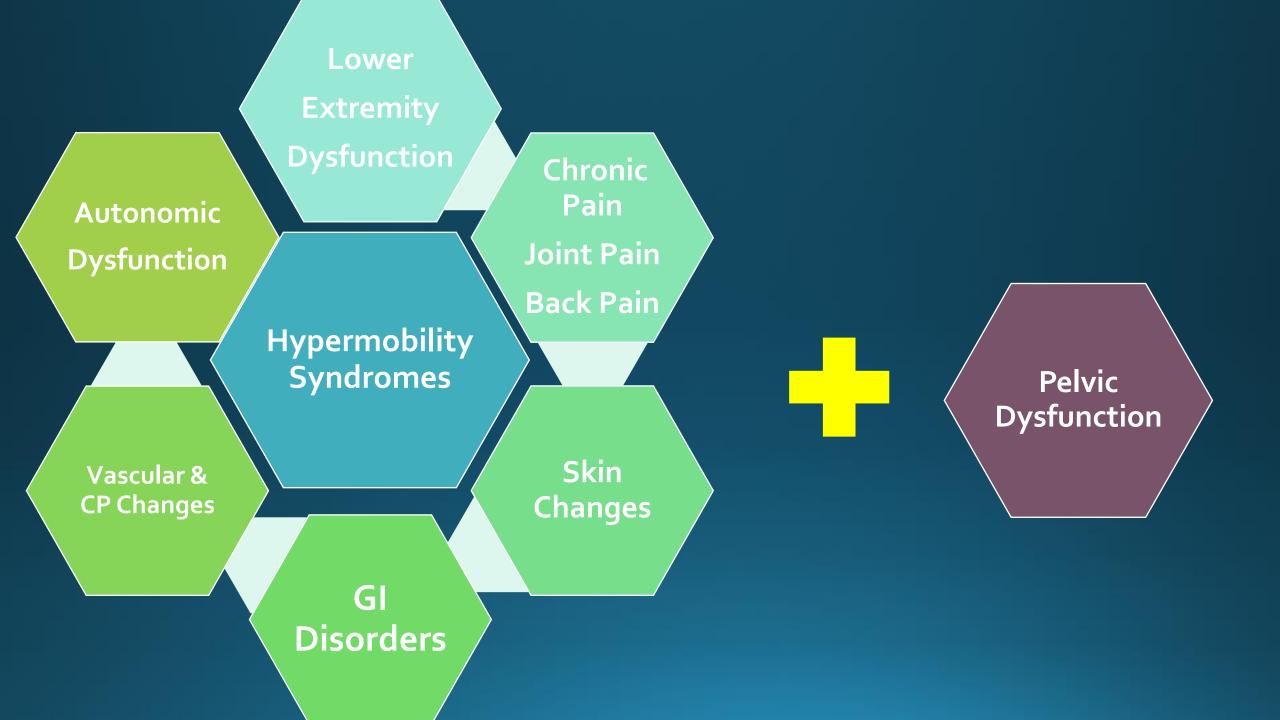
# Heritable Disorders of Connective Tissue (HDCT)

**Ehlers-Danlos Syndrome** 

Marfan's Syndrome

Loeys-Dietz Syndrome

Congenital Hypermobility Syndrome(s)



# 29-year-old Trans Male

- PMHx:
  - Mentioned later/ in passing that he had EDS
- Medications: local vaginal estrogen, gabapentin, HRT, asthma medication and inhaler
- Primary Complaints: Neck pain with radiculopathy, Groin & Hip pain, Increased nighttime urination/leakage, increased UI
- PT Goal: decrease hip pain with standing, walking, working; decreased nocturia and nocturnal enuresis; improve ability to walk for exercise

# Evaluation Components

- PT Evaluation of PFM and bilateral hips:
  - General: BMI >50
  - Observation: Decreased rib to pelvis distance
  - ROM: excessive all directions
  - Strength: General 4/5 with quick fatiguability and increased compensatory strategies. Noted increased lumbar tone with hip muscle testing
  - Neuro Screen: WNL for LE
  - Joint Mobility: L and R hip excessive joint play
  - Balance: Poor ankle strategy with SL balance, Poor pelvic control with SL balance
  - Palpation: generalized decreased tone in muscles with increased trigger points present

# Physical Therapy Interventions

- PFM: Internal manual therapy to hypertonic PFM and relaxation techniques
- Manual Therapy: Addressed increased tone in adductors, iliopsoas and Quadratus Lumborum (light pressure with use of reciprocal inhibition techniques
- Focused Exercise Program: Core re-training, Pelvic Stability, PFM reeducation
- Strength Training: Gym Program and generalized strength training with PFM function
- Balance & Proprioception Training: Single Limb Balance, Joint Proprioception Training

## Other Interventions & Education

- Education on self management of EDS
- Education for probiotic for chronic BV
- Education on osteoporosis risk factors
- Encouraged to discuss local estrogen use with primary care
- Weight Management Program
- Education on bladder irritants

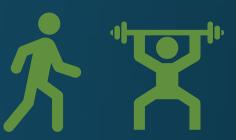
## Outcomes



27 points improvement on PFDI



Decreased pain, incontinence and nocturia



Walking & Strength
Training



10 points improvement on PFIQ



Weight Management

# **Key Points**

Who else could benefit from your pelvic health knowledge?

Everyone has a pelvis!

Assess them as a whole person

Know your resources

# Thank you!



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# Questions?

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