Pelvic Health Physical Therapy

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Objectives

- To understand the role of pelvic health rehabilitation in healthcare and to discuss the offerings pelvic floor PT can provide for our patients.
- Review education background and required credentials to become a pelvic floor physical therapist.
- To review the anatomical structures of the pelvis including pelvic muscle floor anatomy and function.
- To provide an overview of the PT evaluation process including a pelvic floor assessment.
- Identify types of patients who would benefit from pelvic floor PT, review common PT diagnoses, and discuss when to make a referral to a pelvic floor specialist.
- To describe treatment strategies and interventions for pelvic floor disorders.
- Discuss helpful tips and what is needed by the referring provider to optimize patient care.
- To discuss the advantage of a collaborative approach among providers in order to optimize healthcare outcomes for pelvic health patients.

What is Pelvic Health Rehabilitation?

A type of specialized physical therapy offered to people of all ages and gender that focuses on optimizing the function of the pelvic floor muscles and surrounding musculoskeletal structures to improve overall quality of life.

“ Pelvic health physical therapy offers a wide range of benefits for individuals of all ages and genders dealing with various pelvic floor disorders. This physical therapy specialty focuses on strengthening and rehabilitating the pelvic floor muscles, which can lead to improved bladder and bowel control, significant pain reduction, and enhanced sexual function. It also provides crucial support during pregnancy and postpartum recovery, aids in the management of pelvic organ prolapse, and facilitates post-surgical rehabilitation for pelvic surgeries.”

The American Physical Therapy Association (APTA)

Academy of Pelvic Health

Educational Requirements

- Earn a Doctor of Physical Therapy (DPT) degree from a CAPTE-accredited program
- Pass the National Physical Therapy Board Examination (NPTE) and state licensure requirements
- Pursue specialized training and certification in area of Pelvic Health
  - American Physical Therapy Association (APTA): Academy of Pelvic Health
    - Board Certified Women's Health Specialist (WCS)
  - Herman and Wallace Institute
    - Pelvic Rehabilitation Practitioner Certification (PRPC)

APTA Pelvic Health
An Academy of the American Physical Therapy Association

HERMAN&WALLACE
pelvic rehabilitation institute

How Can We Help?

- Optimize ability for parent/ grandparents to play with and care for their children without leaking, pelvic pressure, or abdominal discomfort.
- Allow individuals to be able to travel in the community or run errands without fear of leakage, odor, or needing to “scout out” every bathroom.
- Be able to play sports, exercise, or go to social outing with friends and family with confidence.
- Improve ability to be intimate with a partner without fear of leakage, peroneal heaviness or pain.
- Tolerate an internal exam by a provider for health purposes.
- Allow children to be able to attend sleepovers, participate in school events, or go on social outings without embarrassing moments.

Prevalence

- Pelvic floor dysfunction may affect women, men and children at any age.
- 25% of all adult women suffer from at least one pelvic floor disorder.
- 33 million Americans are affected by overactive bladder symptoms including urinary incontinence.
- Up to 70% of Americans suffer with G.I. related problems every year.
- Urinary incontinence is most common in the prenatal, postpartum, post-menopausal, and post-hysterectomy population.
- Up to 45% of post-menopausal women report dyspareunia (painful intercourse) in the outpatient clinic setting.
- 33% of women are affected my pelvic pain at some point in their lifetime.
- The Prevalence of pelvic organ prolapse is estimated to be up to 50% of women.
- Up to 85% of men will experience urinary incontinence post radical prostatectomy.

What do we treat?

- Bladder Dysfunction
- Bowel Dysfunction
- Sexual Dysfunction
- Pelvic Organ Prolapse
- Pelvic Pain
- Pregnancy and Post-partum
- Musculoskeletal Disorders

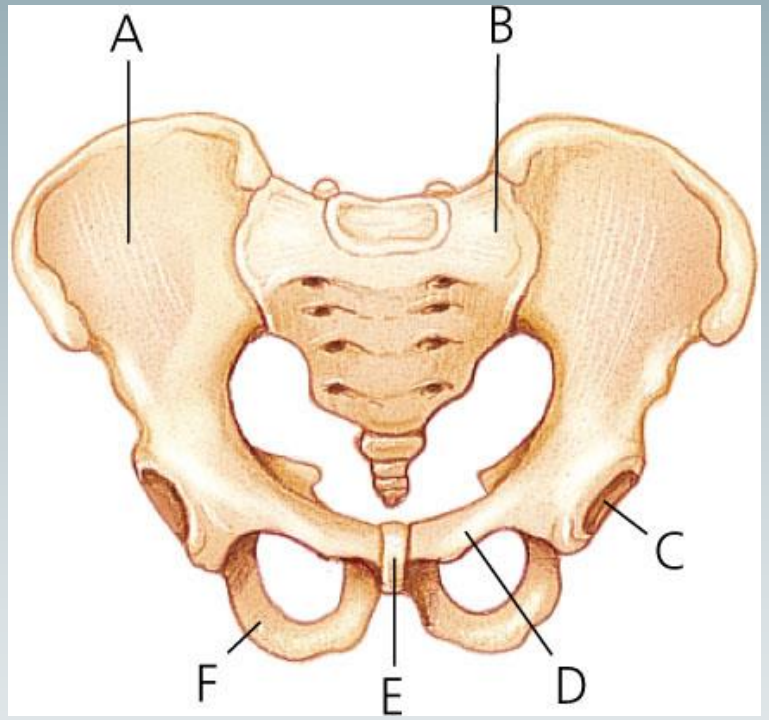
Anatomy and Function of the Pelvis and Pelvic Floor Muscles

The Pelvic Girdle

"Is the crossroads of the body, the architectural centre of the body, the meeting place of the locomotive apparatus, the resting place of the torso, the temple of the reproductive organs, the abode of the new life's development, the site of the two principle departments of elimination, and last but not least, a place upon which to sit…"

- Dr Fred Mitchell Snr (MD, Osteopath).

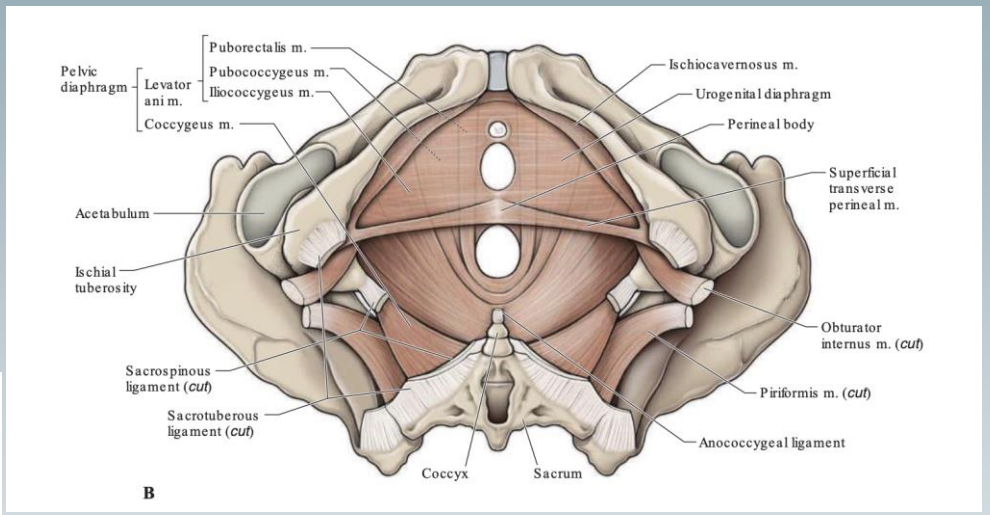
Bones

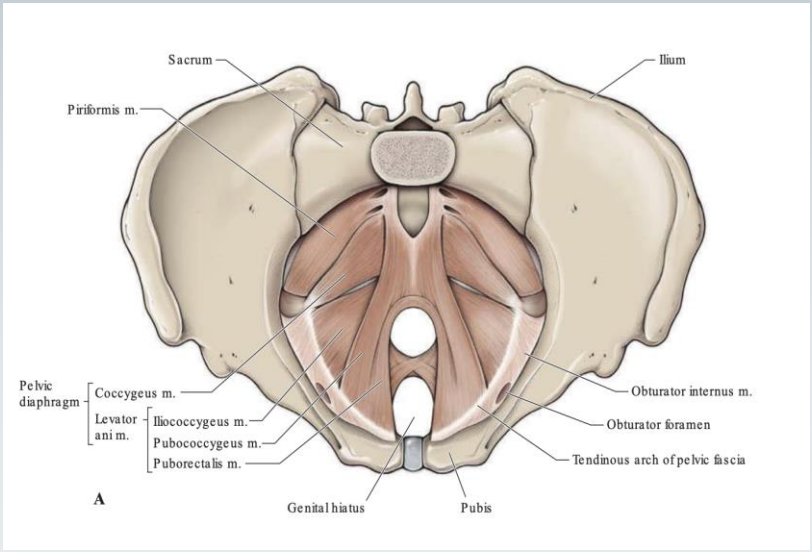


- Ilium (A)
- Sacrum (B)
- Acetabulum (C)
- Pubis (D)
- Ischium (F)
- Coccyx (not identified)

Bony Attachments of The Pelvic Floor

- Coccyx/caudal aspect of Sacrum – Posterior
- Ischial Spine - Posterolateral
- Posterior surface of pubis – Anterior
- Ischial Tuberosity - Inferolateral





Ligaments – Anterior View

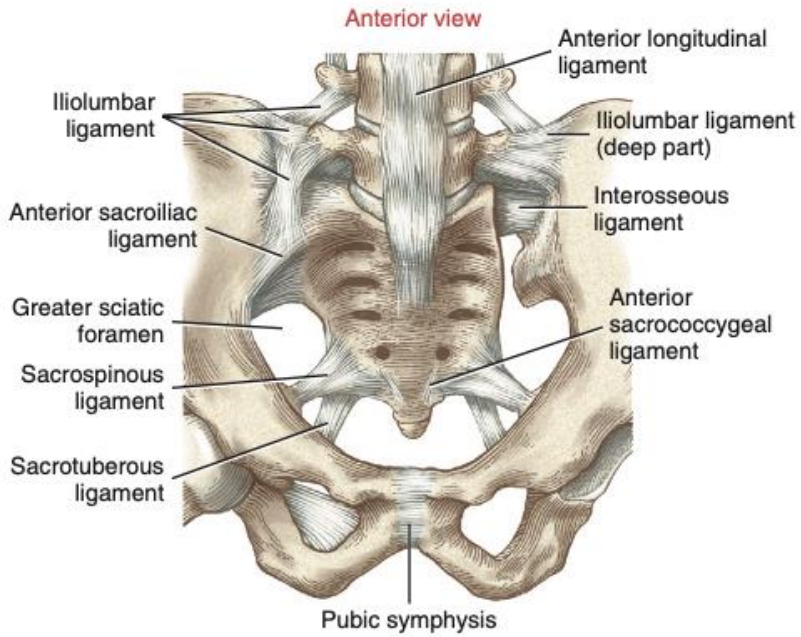


FIGURE 9-70. An anterior view of the lumbosacral region and pelvis shows the major ligaments in the region, especially those of the sacroiliac joint. On the specimen's left side, part of the sacrum, superficial parts of the iliolumbar ligament, and the anterior sacroiliac ligament are removed to expose the auricular surface of the ilium and deeper interosseous ligament.

Ligaments – Posterior View

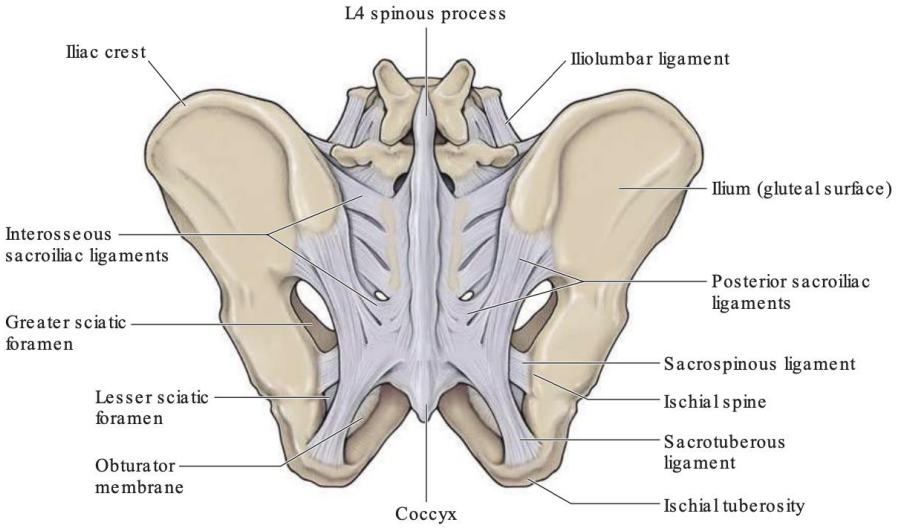


FIGURE 29-3 Posterior ligaments.

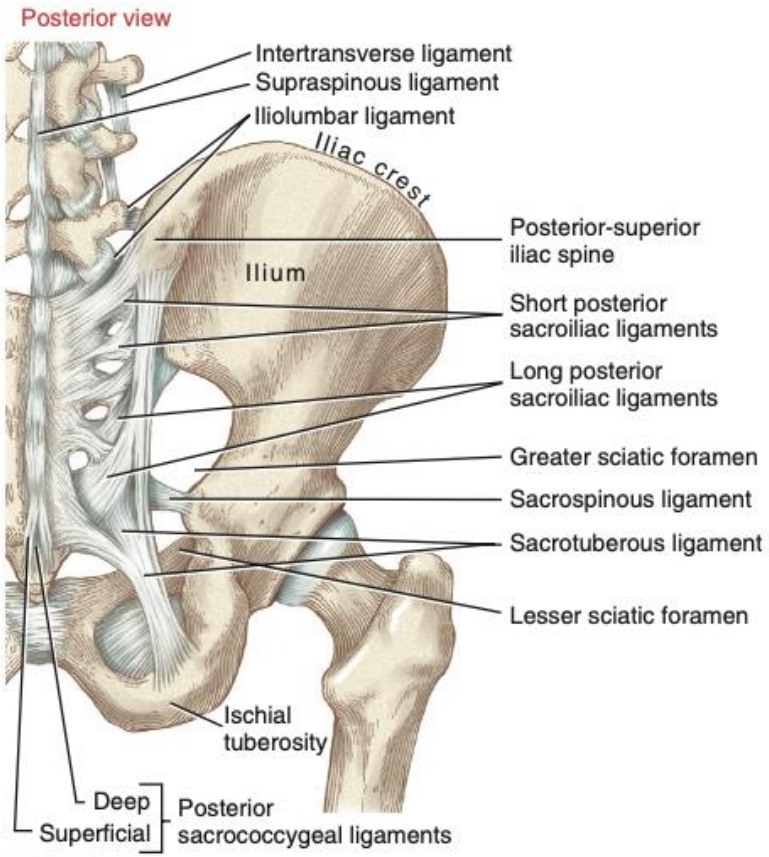
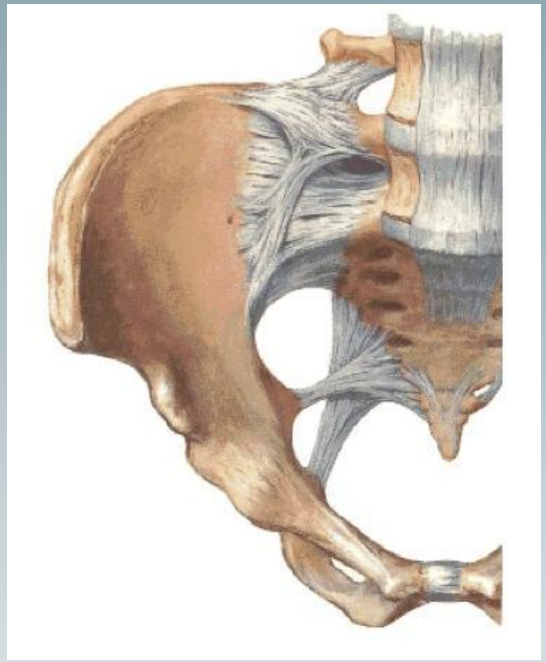


FIGURE 9-71. A posterior view of the right lumbosacral region and pelvis shows the major ligaments that reinforce the sacroiliac joint.

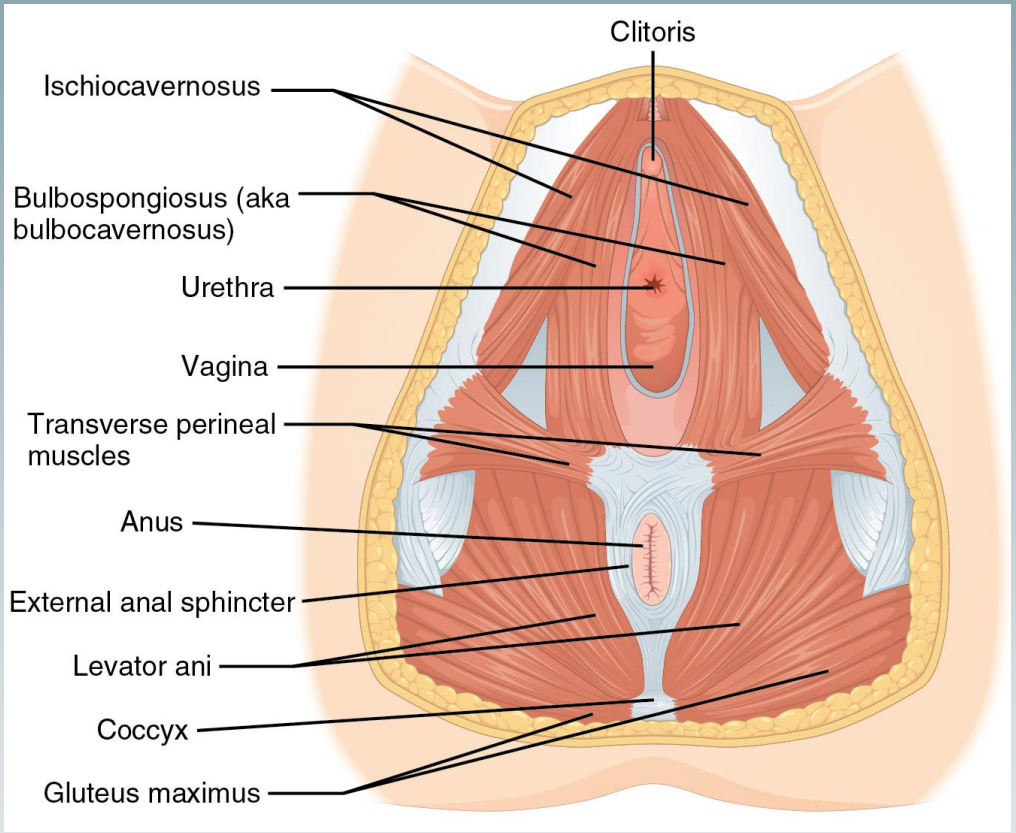
Ligaments: Clinical Pearls

- Anterior SI ligament
  - Very thin
  - Often first to tear with pubic separation
    - direct trauma, pregnancy, labor and delivery
- Dorsal SI (aka: long dorsal) ligament
  - Posterior rotation of ilium/sacral counternutation stretches ligament
    - Prolonged sitting, poor posture, pregnancy, childbirth trauma, fall
- Sacrotuberous ligament
  - Sacral nutation(flexed) stretches
    - Slouched sitting, direct trauma



Pelvic Floor Muscles

- Basin-shaped diaphragm
- Closes the bony outlet
- Supports Visceral Contents of Pelvis
- Plays a role in stability and posture
- Contributes to:
  - Bladder and Bowel Continence
  - Sexual Function
  - Childbirth
- Consists of:
  - Skeletal muscle
  - Ligaments
  - Fascia
  - Neurovascular structures

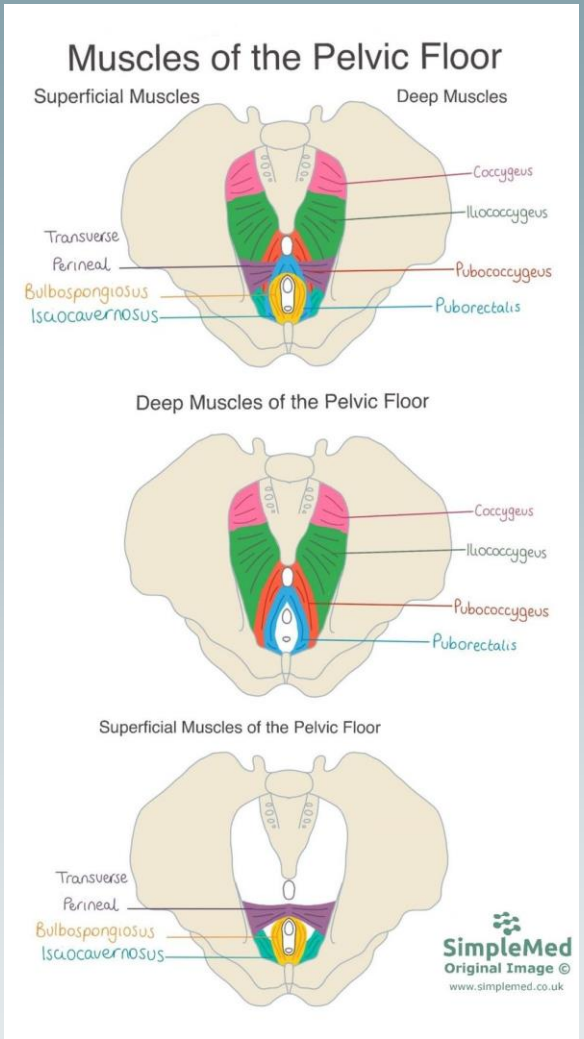


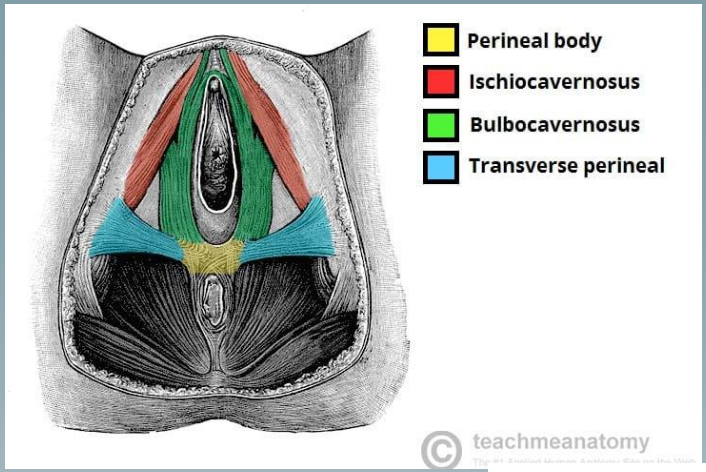
Pelvic Floor Function

- Support
- Stability
- Sphincter
- Sexual
- Sump pump (lymph system)

Layers of The Pelvic Floor

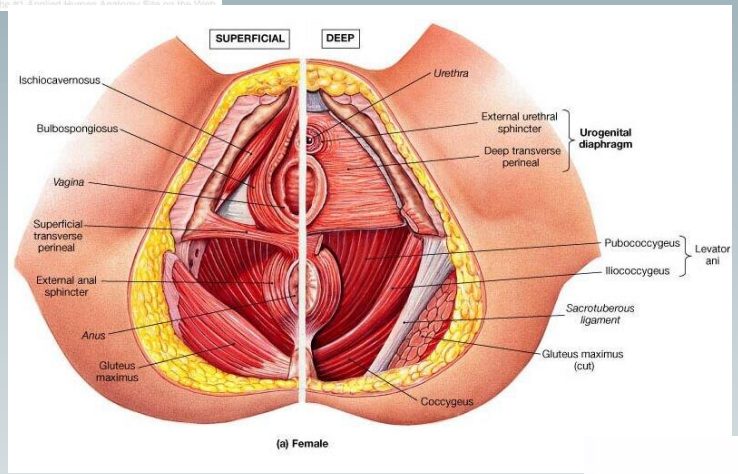
- Layer 1: Superficial Pouch
  - Muscles of Urogenital Triangle
  - External Anal Sphincter
- Layer 2: Urogenital Diaphragm
  - Muscles of Deep Perineal Pouch
  - Perineal Membrane
- Layer 3: Pelvic Diaphragm
  - Levator Ani
  - Coccygeus





Layer 1

Layer 2



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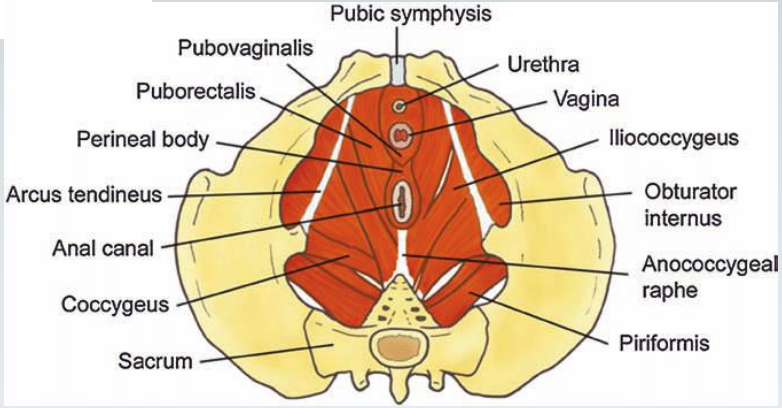
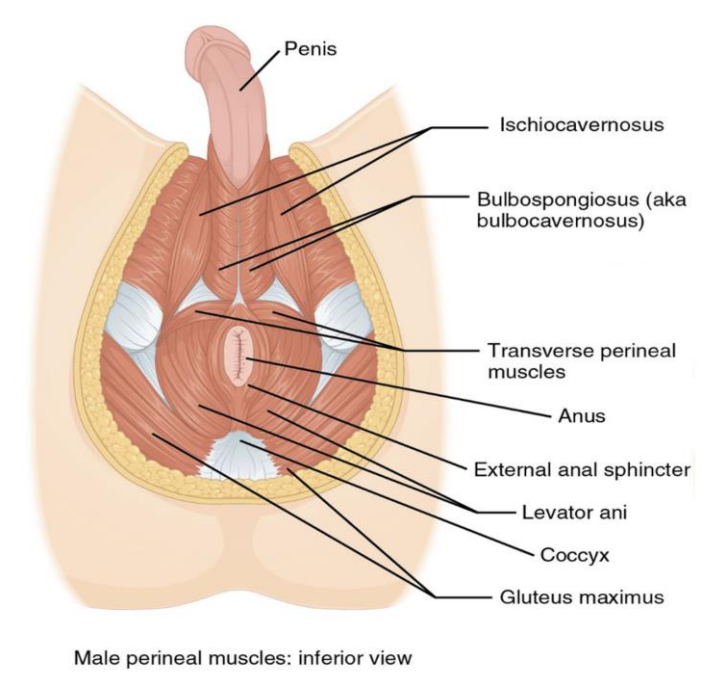
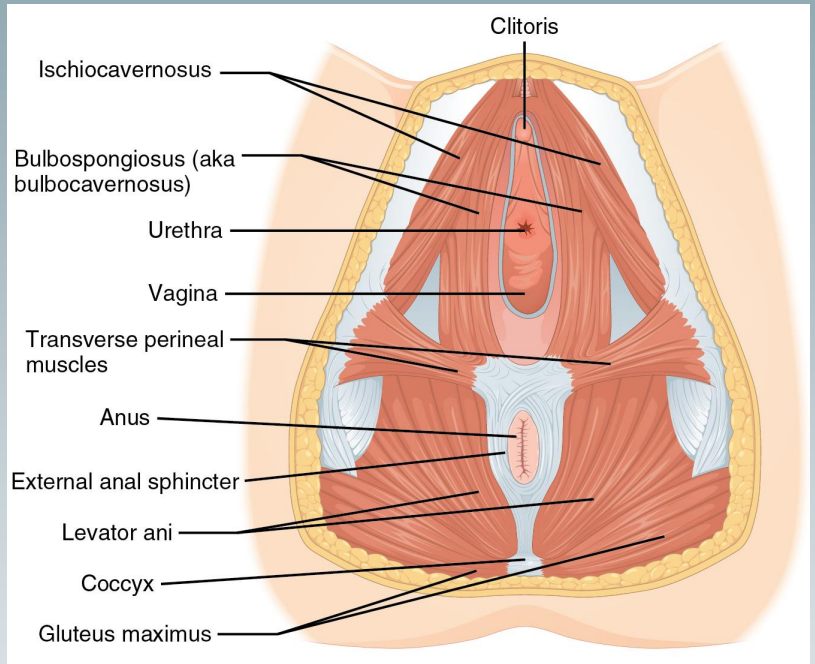


Pelvic Floor Muscles: Male & Female

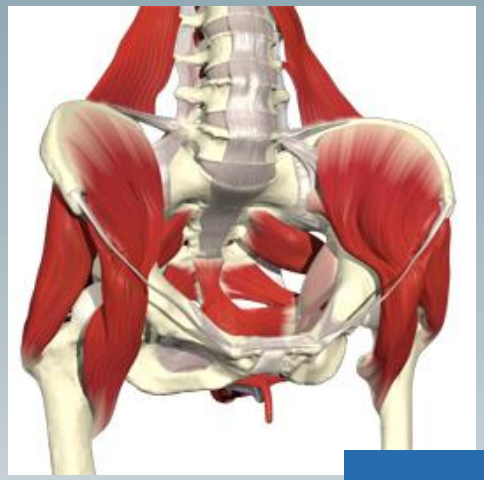


Male perineal muscles: inferior view

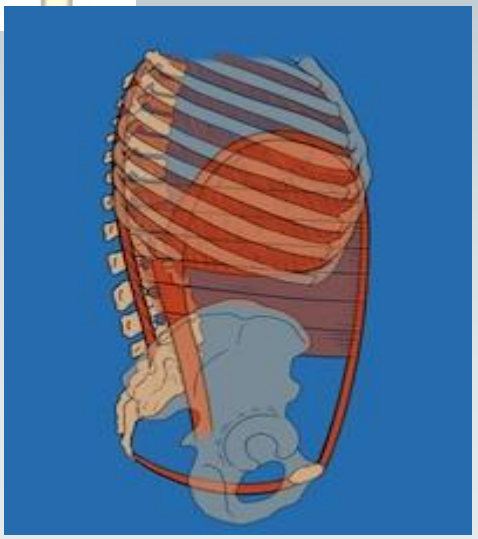


Supporting Muscles

- Facilitate Levator Ani
  - Hip Adductors
  - Gluteals
  - Transverse Abdominis
  - Internal Obliques
  - Deep Hip Rotators
  - **Diaphragm**



- Inside pelvic ring
  - (lateral pelvic wall muscles)
    - Piriformis
    - Obturator internus



Pelvic Floor Physical Therapy Evaluation and Treatment

Evaluation

- Patient History
- Pain scale, quality, and location
- Symptom severity and frequency
  - Insurance requirement
- Functional Limitations
  - Insurance requirement
- Medical & Surgical History
- Medications
- Lifestyle habits, home environment, work, exercise
- Therapy Goals

Evaluation

- PHQ2 Screen
  - Anxiety & Depression
- Vitals
  - Blood Pressure
- Falls Risk Assessment
  - Timed Up and Go
  - 30 Second Chair Rise Test
- Red Flags Screen
  - CES, night pain, weight loss, fevers, hx of CA, hx of trauma, immunocompromised, steroid use
- Contraindications/Precautions

Musculoskeletal Assessment

- Trunk and Lower Quarter Screen
  - Lumbar ROM
  - Sacroiliac Joint Screen
  - Hip and Core Strength
    - Deep Hip Rotators
  - Hip/Knee/Ankle ROM
  - Lower Extremity Flexibility
    - hamstrings, piriformis, hip flexors
  - Balance and Gait Assessment
  - Running Gait Assessment
  - Abdominal Tissue Integrity
    - Diastasis recti, scar tissue, myofascial pain

External Pelvic Floor Assessment

External Tissue Observation

	Findings	Comments
Labia Majora		
Labia Minora		
Clitoris		
Urethra		
Vaginal Introitus		
Vestibule		
Perineal body		
Anus		
Prolapse/Hypermobility		
Other:		

Functional Muscle Assessment

	Findings	Comments
Voluntary Contraction		
Voluntary Relaxation		
Cough Reflex		
EAS Relaxation ("release gas")		
Sustained IAP lengthening ("bear down")		
Inhale Response		
Exhale Response		

External Palpation

	Findings
Pubic symphysis/mons	
Ischiocavernosus	
Bulbocavernosus/spongiosus	
Transverse perineals	
Levator ani	
Perineal body	
Coccyx	
EAS	
Other	

Perineal Sensation

	Light Touch- RIGHT	Sharp / Dull- RIGH	Light Touch- LEFT	Sharp / Dull- LEFT	Comments
Iliohypogastric nerve (L1)					
Genitofemoral nerve (L2)					
Pudendal nerve (S2, 3, 4)					
Perineal branch (S1, 2, 3)					
Inferior rectal branch (S3)					
Inferieor cluneal nerve (S 1, 2,					
Coccygeal plexus (EAS)					
Dermatomes					

Special Tests

	Findings	Comments
Coccyx movement test		
Anal reflex		
Q-tip test		
Pudendal nerve tension test		

Scar Tissue Assessment

☐ Abdomen	
☐ Suprapubic Region	
☐ Vulva	
☐ Perineum	
☐ Anus	
☐ Other:	

Vaginal Pelvic Floor Assessment

Layer 1: Strength

Layer 2: Strength

Layer 3 Muscle Function

	Findings	Comments
Power		
Endurance (time in seconds)		
Repetitions (endurance reps)		
Fast contractions (# in 10sec)		
Relaxation		

Pelvic Floor Muscle Palpation

	Tone	Fasciculation	Tenderness	Comments
Layer 2 Pelvic Floor				
Puborectalis				
Pubococcygeus				
Iliococcygeus				
Coccygeus				
Obturator Internus				
Other:				

Other Internal Assessment

	Findings	Comments
Urethral lift with contraction		
PFM coordination (paradoxical, Valsalva, or limb movement)		
Accessory muscle co-contraction		
Scar Tissue		
Sensation		
Pain		

Special Tests

☐	Pudendal nerve Tinel test	
☐	Other:	

DEGREE OF FORCE	MODIFIED OXFORD SCALE
0	Lack of muscle response
1	Flicker of non-sustained contraction
2	Presence of low intensity, but sustained, contraction
3	Moderate contraction, felt like an increase in intravaginal pressure, which compresses the fingers of the examiner with small cranial elevation of the vaginal wall
4	Satisfactory contraction, compressing the fingers of the examiner with elevation of the vaginal wall towards the pubic symphysis
5	Strong contraction, firm compression of the examiner's fingers with positive movement towards the pubic symphysis.

FIGURe 1 - Scale of pelvic floor muscle strength[3,9]

Rectal Pelvic Floor Assessment

Rectal Exam

	Findings	Comments
Solid/liquid/gas sensation		
EAS Contraction		
EAS Relaxation		
EAS Bulge		
EAS reflex (IAS stretch)		
Anorectal angle		
Coccyx		
Other:		

External Anal Sphincter (EAS) Strength:

Pelvic Floor Muscle Palpation (Rectal)

	Tone	Fasciculation	Tenderness	Comments
External Anal Sphincter (EAS)				
Internal Anal Sphincter (IAS)				
Puborectalis				
Iliococcygeus				
Coccygeus				
Obturator Internus				
Other:				

Special Tests

☐	Pudendal nerve Tinel test	
☐	Other:	

PFM Dysfunction

- Underactive Pelvic Floor
  - Impaired voluntary contraction, decreased muscle tone
- Overactive Pelvic Floor
  - Impaired relaxation, increased muscle tone, impaired contraction
- Pelvic Floor Incoordination
  - Impaired timing and coordination of contraction or relaxation
- Non-Functioning Pelvic Floor
  - Non-contracting, non-relaxing

Underactive Pelvic Floor Muscles (Risk Factors)

- Childbirth
  - Nerve traction/compression
  - Instrumented assisted delivery
  - Episiotomy/tearing
  - Prolonged labor
  - Abnormal presentation
  - High birth weight
  - Surgery
- Chronically increased abdominal pressure
- Obesity
- Smoker
- Chronic cough/asthma
- Repetitive lifting
- Constipation/straining
- High impact exercise
- Age
- Menopause
- Immobility

Overactive or Non-functioning Pelvic Floor Muscles (Risk Factors)

- Lumbar or pelvis malalignment
- Postural dysfunction
- Childbirth trauma
- Surgical trauma
- Sexual or emotional trauma
- Pelvic inflammation or infection
- Sexual Dysfunction
- Hemorrhoids/fistula/ fissure
- Pelvic or abdominal pain conditions
- Chronic stress or anxiety
- Poor posture or body mechanics
- Excessive kegel exercises
- Guarding from injury
- Nerve irritation

Bladder Dysfunction

Stress Incontinence (SUI): involuntary leakage that occurs with increased intra-abdominal pressure.

Urge Incontinence (UUI): involuntary leakage triggered by an urgent and compelling need to urinate, often due to abrupt contraction of bladder

Mixed Incontinence: a combination of both stress and urge incontinence.

Functional Incontinence: Involuntary leakage due to the inability to reach the bathroom secondary to physical limitations, cognitive impairment, or environmental barriers.

Frequency: urinating more than 8 times a day or needing to urinate less than two hours after the last void. This may or may not be accompanied by urgency but can lead to urgency symptoms.

Urgency: a sudden and intense need to urinate without warning, along with an inability to postpone the urge.

Hesitancy/intermittency: challenges in starting or sustaining a urinary stream.

Retention: an increased volume of urine remaining in the bladder after voiding.

Urinary Incontinence

SUI

- Typically results from weakened PFM, prolapse, or decreased urethral pressure or increased hypermobility
- not associated with bladder contraction

UUI

- Often associated with pelvic floor overactivity and tension
- May or may not be associated with detrusor instability (OAB)
  - Often associated with urinary frequency
- Key in the door syndrome
- May be related to bladder irritants, chronic UTI's, retention, medication side effects, neurological dysfunction, sphincter defects, stress incontinence, prolapse, hormone changes

Bowel Dysfunction

Fecal Incontinence: The involuntary loss of stool or gas. Often due to muscle or nerve damage, reduced rectal sensation, or cognitive impairment.

Constipation: Difficulty or infrequent passage of stool.

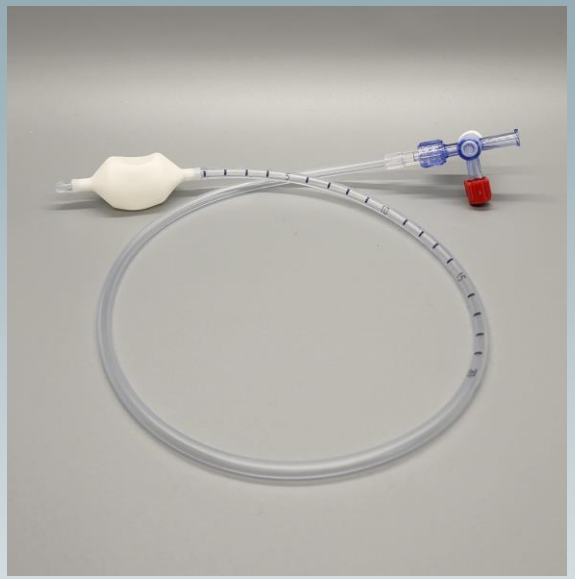
- May involve hard stools, excessive straining, or a sense of incomplete evacuation.

Dyssynergic Defecation: Impaired evacuation of stool due to pelvic floor muscle incoordination. Characterized by paradoxical muscle contraction or inadequate muscle lengthening (push force).

Clinical Practice Guidelines: Constipation

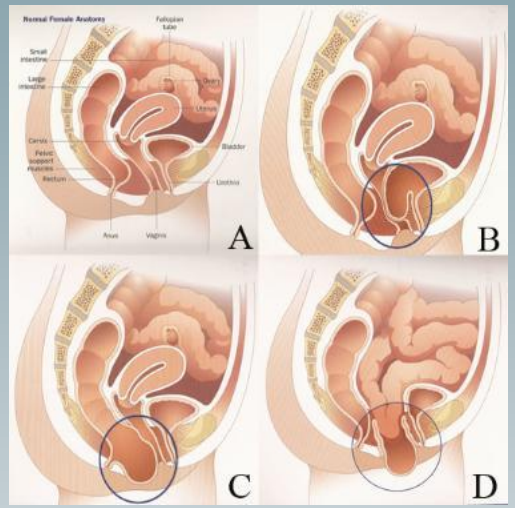
Physical Therapy Management of Functional Constipation in Adults: A 2021 Evidence-Based Clinical Practice Guideline From the American Physical Therapy Association's Academy of Pelvic Health Physical Therapy

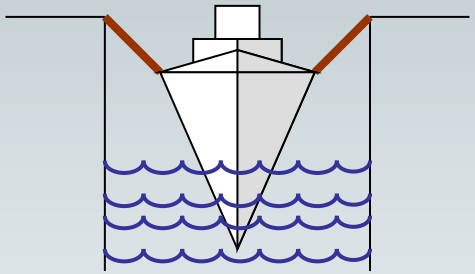
- LaCross, Jennifer A. PT, DPT, PhD(c)[1]; Borello-France, Diane PT, PhD[2]; Marchetti, Gregory F. PT, PhD[2]; Turner, Rose MLIS[3]; George, Susan PT, DPT[4]
  - ***Journal of Women's Health Physical Therapy***



Pelvic Organ Prolapse

- Named for the specific organ which descends
  - Cystocele - decent of bladder
  - Uterocele - decent of uterus
  - Rectocele - weakness of the rectal wall
  - Vaginal Wall Prolapse - weakness of vaginal wall
  - Enterocele - decent of the intestines/rectum
- Often associated with underactive PFMs
- muscle tension of pelvic girdle, abdominals, and pelvic floor may also contribute to POP





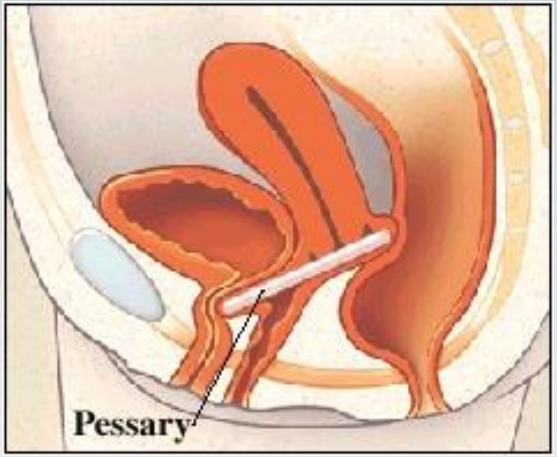
Dock: bony pelvis
Ship: pelvic organs
Rope: ligaments and fascia
Water: pelvic floor muscles

Pessaries

Used to support the pelvic floor when the muscular and fascial structures are unable

Often used in conjunction with PT treatment for optimal outcomes

- Exertional stress urinary incontinence
- Sports related prolapse



PFPT for POP

Grade I–II: PFPT is effective and preferred for early-stage POP

- Effective for symptom reduction and function improvement
  - *Hagen & Stark, 2011*: PFPT significantly reduced prolapse symptoms and improved pelvic floor muscle strength
  - *Braekken et al., 2010*: 6 months of PFMT improved POP-Q stage in women with grade I–II POP
- Recommended as **first-line treatment** per ACOG and NICE guidelines

Grade III–IV: Surgery may be more appropriate for advanced POP

- presence of significant symptoms or failure of conservative care
- higher success rate for anatomical correction
  - *Maher et al., 2016 Cochrane Review*: Surgical repair superior in severe prolapse cases for long-term anatomical support
  - Risks include mesh complications, recurrence, and need for reoperation

PFPT recommended pre- and post-op to improve outcomes and reduce recurrence

Combination approach (PFPT + surgery) offers optimal functional and long-term outcomes

Pelvic Pain

- PFPT Recognized by the AUA and ACOG as an integral part of the treatment plan for management of women with pelvic pain disorders.
- Multiple systems may be involved, resulting in multiple diagnoses
- May experience altered sensation or skin changes

Chronic Pelvic Pain

- Non-cyclic pain lasting >6 months
- Often multi-factorial: musculoskeletal, neurological, visceral, urological, gynecological, dermatologic, gastrointestinal

Pelvic Pain

- Musculoskeletal or myofascial
  - Pelvic Girdle Pain
    - Sacroiliac Joint , Pubic Symphysis, lower back dysfunction
  - Myofascial pain
  - Vulvodynia /Vestibulodynia
  - Piriformis syndrome
  - Levator ani syndrome
  - Abdominal or pelvic scarring
- Neurological
  - Pudendal neuralgia
- Dermatologic
  - Vulvar vestibulitis
  - Lichen's sclerosis
- Gastrointestinal
  - Irritable bowel syndrome
  - Proctalgia fugax
  - Anismus
  - Constipation
  - Inflammatory bowel disease
- Urologic
  - Interstitial cystitis/painful bladder syndrome
  - Urethral syndrome
- Gynecological/OB
  - Endometriosis/Adenomyosis
  - Dysmenorrhea
  - Vaginismus
  - Dyspareunia
  - Pelvic congestion syndrome
  - Infertility
- Sexual
  - Superficial or Deep Dyspareunia
    - Pain with insertion/penetration
  - Pain with orgasm
  - Post-coital voiding
  - Trauma/abuse
- Psychogenic
  - Anxiety/Depression
  - OCD
  - Abuse

Exam Findings

Stress Urinary Incontinence

- Gait & balance disturbance
- Lumbosacral hypomobility
- Weakness in abdominals, hips, pelvic floor, postural muscles
- Reduced pelvic floor endurance
- Pelvic floor over-/underactivity
- Thoracolumbar/abdominal myofascial tension
- Tightness: LE muscles, erector spinae, psoas
- Postural faults

Urge Urinary Incontinence

- Type "A" personality
- Often starts as stress incontinence
- PF, trunk, hip, local/global stabilizer weakness
- Biomechanical faults in the feet
- PFMs under-/overactive
- TA and lumbar overactivity
- Pelvic asymmetries or LLD
- Myofascial restrictions

Exam Findings

Fecal Incontinence

- ↓ Anal sphincter tone & PF strength/endurance
- Impaired rectal reflexes
- Leakage with cough/Valsalva
- Hip weakness
- Postural imbalance

Constipation

- PF muscle overactivity
- Tenderness of pelvic floor
- Abdominal coordination/tension issues
- ↓ Rectal pressure generation
- Posterior-lateral hip tightness

Dyssynergic Defecation

- Paradoxical anal contraction or incomplete relaxation
- Poor coordination: abdominals + PF
- Excess or absent perineal descent
- Ineffective bearing down
- ↓ Hip rotation strength & ROM
- Lumbar/hip joint stiffness
- Proximal hip tightness

Treatment Strategies

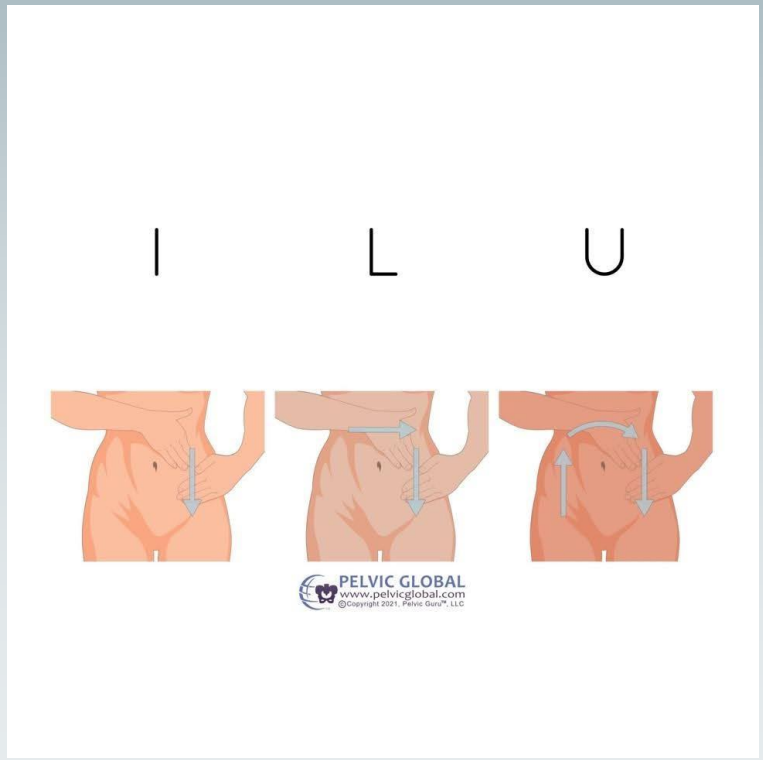
Therapeutic Exercise

- PFM strengthening/endurance training (kegels) for hypoactive muscles
  - Use of vaginal weight cones, pelvic wedge, therapy ball
- Maximal voluntary quick contractions
  - Supine, quadruped, sitting, standing
- Sustained/prolonged contractions
  - Progressive time to improve endurance
- Elevator contractions
  - Progressive lift and squeeze
- Mixed Contractions
  - Sustained contraction followed by quick activation
- Pelvic floor down-training strategies for overactive muscles
- Strength and stability exercises for trunk and lower quarter
  - Deep hip rotators, abdominals, adductors, glutes, hip abductors
- Breathing strategies for pelvic floor muscle relaxation
- Yoga, inversions
- Lifting mechanics

Manual Therapy

- Internal and external manual techniques
  - improve mobility of pelvic floor, abdominal, lumbosacral, thoracic and hip muscles (adductors, hip flexors, glutes)
  - Reduce muscle tension and myofascial pain
  - Soft tissue mobilization, trigger point release, myofascial release
  - Visceral manipulation
  - Thiele massage to the perineum
  - Bowel motility massage
- Joint mobilizations of spine and hips
- Craniosacral therapy

- Progressive dilator training
  - In clinic or for home use
- Pelvi/therawand massage
- vibration, hot/cold
  - self-massage
  - TrP release



Neuromuscular Re-education

- Pelvic floor and abdominal muscle re-training
- Diaphragmatic breathing with coordinated pelvic floor muscle facilitation and relaxation strategies
- EMG Biofeedback with superficial sensors or internal probe
- Coordination training with verbal or tactile cues
- Relaxation/physiological quieting to assist patients with overactivity
- Balance and gait training

Patient Education

- Toileting Strategies to optimize position, breathing mechanics, and muscle function for improved elimination
- CNS quieting
  - visualization, mindfulness techniques, and breathing strategies
- Pain Neuroscience Education (PNE)
  - to reduce fear avoidance behavior, catastrophizing, central sensitization
- Handouts, online resources, helpful books
- Education for helpful positioning with intercourse
- Education for diet considerations
- Intra-abdominal pressure (IAP) management strategies

Bladder Health Education

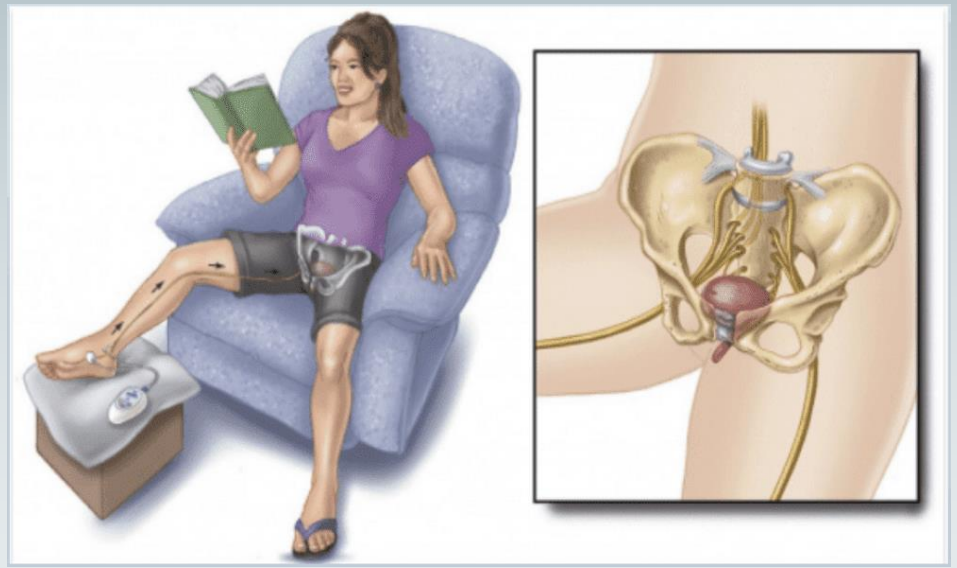
- Bladder diary
- irritants, fluid intake, voiding habits
- Bladder retraining or timed voiding (behavioral method)
- urge inhibition strategies
  - ”Quick Flicks” for urge suppression

Bowel Health Education

- Behavioral & Lifestyle Strategies
- Scheduled toileting and bowel habit retraining
- Dietary fiber and adequate hydration
- Squatty potty

Modalities

- Internal Electrical Stimulation
  - Facilitate weak PFM or quiet overactive PFM/bladder
  - Urgency: 12.5Hz, 5-20pps, 100-300ms pulse width
  - Stress incontinence: 50-100Hz, 40-60pps, 100-300ms pulse width
- TENS (suprapubic, sacral, posterior tibial nerve)
  - PTNS for OAB
  - Detrusor instability (urgency, retention)
  - Pelvic pain
- EMG Biofeedback
  - Underactive PFM
  - Overactive PFM
  - Incoordination
  - Identification
- Vaginal Weights
  - Functional strengthening
  - of PFM
  - Effective for prolapse
- Therawand
  - Self trigger point release



EMG Biofeedback

A non-invasive technique that uses sensors or vaginal/rectal probes to measure superficial electrical muscle activity

- Sensors are placed externally or internally (vaginally or rectally)
- Pt performs PFM or accessory muscle contraction
- Visual or auditory signals
- A monitor displays real-time muscle activity as graphs or sounds.
- Helps identify if you're overusing, underusing, or misusing pelvic floor muscles

Improves awareness and control of pelvic floor function

Guides training for strength, coordination, or relaxation

Personalized, data-driven therapy

Enhances treatment effectiveness

Can accelerate progress with targeted feedback

Male Urinary Dysfunction

- Benign Prostatic Hyperplasia (BPH): urethra passes through prostate, creates blockage
  - Urinary hesitancy and intermittency
  - Urinary urgency and frequency

- Post-prostatectomy:
  - Stress incontinence is common post-surgery. Typically lasts immediately post catheter removal to 16 weeks – 12 months.
  - Studies support post op rehab for pelvic floor and lower quarter strengthening to reduce the length of incontinence.

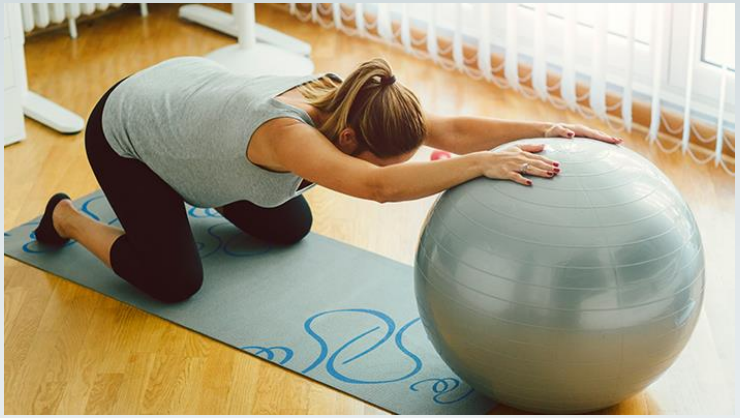
Pregnancy and Post-Partum

Optimize Functional Mobility in all stages of Pregnancy

- Support pelvic organs and spine
- Prepare for labor and delivery
- Promote recovery after childbirth

Common diagnoses:

- Diastasis Recti
- Pregnancy Related Pelvic girdle pain (PGP)
- Pubic Symphysis Dysfunction
- Sciatica
- Stress Urinary Incontinence
- Constipation
- Pelvic Floor Weakness



Pregnancy and Post-Partum

Pregnancy

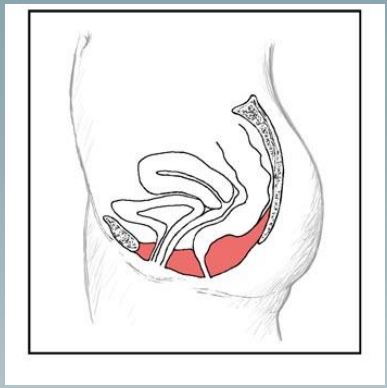
- Address pelvic girdle pain, sciatica, and low back pain
- Manage urinary leakage and constipation
- Teach safe core and pelvic floor activation
- Birth prep: perineal massage, labor positions

Postpartum

- Rebuild core and pelvic floor strength
- Treat diastasis recti, prolapse, or pain with intercourse
- Support healing from vaginal or C-section delivery
- Promote bladder and bowel control
- Return to running/exercise guidance

Coccyx Dysfunction

- **Hypomobility:**
  - Pain with extension
    - most often d/t a tight anterior sacrococcygeal ligament (SC) and posterior sacrococcygeal joint impingement.
  - Pain with flexion
    - most often d/t a tight posterior sacrococcygeal ligament, and anterior. Sacrococcygeal joint impingement.
- **Hypermobility:**
  - Laxity of sacrococcygeal ligaments, and/or joint dislocation/subluxation



- Treatment:
  - Myofascial techniques to lower quarter, anterior and posterior structures
  - External and internal mobilization techniques to SIJ and coccyx area
  - TrP release to pubococcygeal and obturator externus muscles
  - Lumbar mobility
  - Posture and body mechanics, sitting positions, cushions, lifting, childcare tasks
  - Pelvic floor strength and core stabilization

Adjunct Interventions

- Anticholinergic/ ANS inhibitors
- Antidepressants
- Surgery
- Psychological or Sex counseling
- Relaxation/yoga
- Acupuncture
- Herbal remedies
  - Pumpkin Seed Extract, Vitamin C, Cranberry, D-mannose, Lactobacilli

Outcomes Tools

Female Specific

- Pelvic Floor Distress Inventory (PFDI-20)
  - 20 item questionnaire (short form)
  - Urinary, Pelvic Organ Prolapse, and Colorectal Distress subscales
- Pelvic Floor Impact questionnaire (PFIQ-7) (short form)
- validated, reliable, and responsive for condition specific quality of life questionnaires for women with pelvic floor disorders (Barber et al.)
- Australian Pelvic Floor Questionnaire
  - Urinary, Bowel, Prolapse, and Sexual Function subsections
  - Valid to use sections individually

Male Specific

- American Urology Association Symptom Score
  - Questions related to urgency, frequency, ability to empty, and the quality of micturition
  - Scoring: mild 0-7, moderate 8-19, severe 20-35
  - aka: International Prostate Symptom Score (IPSS)
- National Institutes of Health (NIH)-Chronic Prostatitis Severity Index

Evidence

A systematic review by Nahon et al. reported that PFM training improves external sphincter muscle strength and should be incorporated into post operative training to reduce incontinence post-prostatectomy. They also cited that biofeedback could assist in identifying these muscles.

Dorsy (review of several RCT's) found that strengthening the PF post-prostatectomy showed significant improvement in urinary incontinence, post- micturition dribble and erectile dysfunction.

FitzGerald et al. RCT published in IC journal indicates that patients with interstitial cystitis (IC) had decreased pain and improved QOL scores when treated with myofascial release compared to general massage and manual techniques.

A systematic review by Dumoulin et al found that participants who completed pelvic floor muscle training were 6 times more likely to report improvement in symptoms of UI than the placebo group.

Castellani D et al. RCT that looked at combo treatment of Low-Dose Intravaginal Estriol and Pelvic Floor Rehabilitation in Post-Menopausal Stress Urinary Incontinence. Suggested that topical estrogen and PFMT in combination are more effective in treating SUI than either alone.

Referral Considerations

Is it a *Pelvis* or a *Pelvic* Issue?

- Important clarification for referral process
- Insurance limitations
  - some insurances only cover pelvis/ lumbo-pelvic dysfunctions
    - Abdominal pain vs pelvic pain
- **Pelvis** Dysfunction - relates to the boney pelvis, lumbo-pelvic region, hip muscles
  - Pelvic girdle = hip girdle
- **Pelvic** floor Dysfunction
  - internal pelvic floor changes or impairments related to incontinence, bowel dysfunction, pelvic organ prolapse and pelvic pain

Covered Diagnoses
(by Medicare)

- Urinary Incontinence
  - Stress, Urge, Mixed
- Urinary Urgency and Frequency
- Fecal Incontinence
- Constipation
- Abdominal Pain
- Groin Pain
- Anterior Hip Pain
- Lumbar Pain with Radiculopathy
- Coccydynia
- Pubic Symphysis Dysfunction

Non-Covered Diagnoses
(By Medicare)

- Pelvic Floor Dysfunction
- Pelvic Organ Prolapse
- Pelvic Pain
- Pelvic Floor Congestion
- Pudendal Neuralgia
- Prostatitis
- Dyspareunia
- Vulvodynia
- Vaginismus
- Hypersensitive Clitoris
- Vulvar Vestibulitis Syndrome
- Interstitial Cystitis

*Skilled therapy interventions for these diagnoses are considered “investigational” due to lack of peer reviewed evidence on the effect of patient health outcomes.
* At our clinic, patients are asked to sign an ABN if patient has Medicare, even if it is not the primary insurance or patient has a supplemental pain

Time Frames

- Evaluation: 45 mins
- Treatment: 45 mins
- Frequency: 2-4x/month
- Duration:
  - Urinary Incontinence: 6 to 8 visits
  - Pelvic Pain: 10-12 visits
- Time from referral to evaluation: 2-4 months

Skilled PT Necessity & Outcome Tools

- Many insurances require a “body specific outcome tool” to receive treatment authorization
  - Outcome tool must support need for therapy
  - Therapist must be able to demonstrate progress over time
- Goal tracking – needs to be functional, achievable and not just pain related

Pelvic Medicine Team

- Primary Care Provider
- Urologist
- Gynecologist
- Gastroenterologist
- Physical Therapist
- Psychotherapist
- Sex Therapist
- Dietician/Nutritionist
- Acupuncturist
- Homeopathic Provider
- Neurologist
- Pain management specialist
- Reiki master
- Massage Therapist

Questions?