Understanding Chronic Pelvic Pain: The Role of Physical Therapy in Pelvic Floor Health

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No true disclosures

- Work for UIC Medical Center- Program Coordinator for the Incontinence and Pelvic Pain Program

- Adjunct Faculty at UIC
Understand what a pelvic floor therapist / women’s health therapist is and what they treat

Understand basic pelvic floor anatomy

Identify different Diagnosis that are treated by a pelvic floor therapist.

Be able to explain what treatment options are offered by a pelvic floor therapist

Identify different resources for finding a Pelvic floor therapist and for different diagnosis in general.
The emphasis of the health sciences on fitness and wellness has brought to women's attention a need to pay closer attention to their bodies during recreation, work, and throughout life.

There are specialized trained therapists who use every facet of their physical therapy training to evaluate and treat female clients, promoting and enhancing health through the life span.

All treatments are individually designed after thorough evaluation.

-Section on Women’s Health Of The American Physical Therapy Association
The Present Scope of WH PT

- Men and Women
- Incontinence and other Bladder Problems
- Pelvic pain /Vaginal pain/Rectal Pain
- Pelvic Floor Muscle Dysfunction
- Prenatal and postpartum musculoskeletal pain
- Osteoporosis
- Rehabilitation following breast surgery, prostate SX and other Gynecologic SX
- Lymphedema
- The Adolescent Female
- The female athlete
- Fibromyalgia
- Chronic pain
- Women in the workplace
- Exercise issues and Aging
- Wellness and Prevention
- Others
From Gray’s Anatomy
Female pelvic floor muscles

From Gray’s Anatomy
The Muscles of the Pelvic Floor

- Superficial Layer - Urogenital diaphragm
  - Ishiocavernosus
  - Bulbospongiosus
  - Superficial Transverse Perineal

- Levator Ani
  - Pubococcygeus
  - Iliococcygeus
  - Puborectalis

- Coccygeus
- Obturator Internus
Male pelvic floor muscles

From Gray’s Anatomy
Functions of the Pelvic Floor

* **#1 Supportive**
  * Holds everything up
  * Supports pelvic organs against gravity and increases in abdominal pressure, also provides support and tone for the vaginal walls

* **#2 Sphincteric**
  * Keeps things closed
  * It helps control openings such as the urethra, vagina, and rectum

* **#3 Sexual**
  * Increases pleasure and tone in the vaginal and rectal canal during intercourse

* **#4th Stabilization**
  * The floor of your core muscles or your foundation
  * How important is the foundation of your house?
<table>
<thead>
<tr>
<th>Function</th>
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<tbody>
<tr>
<td>Assist in pelvic – Spinal Stability</td>
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<tr>
<td>Iliococcygeus and Ishiococcygeus controls the sacrum</td>
</tr>
<tr>
<td>Maintains erection of the clitoris</td>
</tr>
<tr>
<td>Provides rectal support during defection</td>
</tr>
<tr>
<td>Assist in unloading the spine</td>
</tr>
<tr>
<td>Inhibitory affect on the bladder activity</td>
</tr>
<tr>
<td>Maintains the anorectal angel</td>
</tr>
<tr>
<td>Maintains engorgement in the labia</td>
</tr>
<tr>
<td>Others</td>
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</tbody>
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Innervations

- 1st Muscle Layer, Compressor Urethrea, Sphincter Urethrea, and Deep Transverse Perineal
  Perineal branch of pudendal S2, S3, and S4

- Internal and External Anal Sphincter
  Inferior rectal nerves, perineal branch of the 4th sacral nerve, and pudendal nerve

- Levator Ani:
  Ventral Rami of the 3rd, 4th, and 5th Sacral Spinal Nerves - Barber et al 2002

- Obturator Internus
  Obturator internus nerve L5 and S1
Other Anatomy to Consider

But not today

- Viscera
- Ligaments
- Fascia
- Tendon insertions in and around the pelvis
- Lymph and Blood Supply
- Other Relevant Muscles
  - Abdominal, Gluteal, PSOAS
  - Others
Chronic Pelvic Pain
1 out of 10 women see their gynecologist for non-routine visits because of chronic pelvic pain

In over 5000 U.S. women aged 18-50 found that approximately 1 out of 7 are affected by chronic pelvic pain

Over 50 different conditions can be responsible for the pain
Factors Predisposing women to CPP: A Systematic Review

- Non-cyclical CCP was associated with numerous factors
  - C-section scar
  - Pelvic Adhesions
  - Childhood physical or Sexual Abuse
  - Lifetime Sexual Abuse or any Abuse
  - Others

- Anxiety, Depression and Sexual Assault were more common in women with dyspareunia.

- Pallavi et al; BMJ 2006, 332: 749
Besides physical and emotional trauma, there is a significant association between sexual victimization before age 15 and later.

CCP. Lampe et al, 2000

Strong associations between sexual abuse and pelvic pain complaints.

Jamieson DJ, Steege JF 1997
Walling MK, Reiter RC, O’hara MW, et al. 1994
Conditions that contribute to CCP
By Howard FM, Perry CP, Carter JE et al. 2000

* Gynecologic Adhesions
* Endometriosis
* Ovulatory Pain
* Pelvic Congestion Syndrome
* Pelvic Organ Prolapse
* Chronic UTI’s
* Chronis Bladder Infections
* IBS
* Colitis
* Constipation

* Myofascial Pain (Trigger Points)
* Degenerative Joint Disease
* Poor Posture
* Low Back Pain
* Muscular Strain or Sprain
* Hernias
* Fibromyalgia
* Depression
* Bipolar Disorder
* Sexual Trauma
Common CCP DX’s

- Prolapses
- Endometrial adhesions or nodules on pelvic ligaments
- Referred pain from the low back or spine
- Pregnancy
- Pelvic trigger points
- Fibromyalgia
- Abdominal or perineal scar adhesions
- Piriformis syndrome
- Levator Ani Syndrome
- Pelvis fractures

- Infiltration of gynecologic metastases/benign growths
- Coccyxdynia (coccygodynia, coccyalgia)
- Vulvodynia
- Dyspareunia
- Vaginismus (vulvismus)- pelvic floor tension, myalgia, and hypertonis
- Vulvar Vestibulitis syndrome
- Pelvic floor dysfunction
- Injury sustained during sexual assault
Not so common Dx

* Vulvar Dermatoses- that may cause vulvar pain
  * Lichen Sclerosis
  * Lichen Planus
  * Lichen Simplex Chronicus
* Can be treated by PT
* Importance to DX properly

* Chronic Yeast Infections
* Important to always culture
  * Improper use or over use of medications (both prescription and OTC) can result in Vulvar Problems
A study of The Prevalence of Dyspareunia involving 313 women showed that 191 reported having dyspareunia at some time
- 86 women reported it had resolved
- 105 still had it (51 of which had it their whole life)

Most of the women had not discussed their dyspareunia with a health care professional and were unaware of the cause of their problem.

GLATT, AARON E.; ZINNER, STEPHEN H.; McCORMACK, WILLIAM M. Obstetrics & Gynecology. 75(3):433-436, March 1990
Interstitial Cystitis

- Painful Bladder syndrome
- NIDDK estimates that 1.2 million women and 82,000 men in the United States have IC/PBS

- Range in severity
  - Pelvic pressure and Pain
  - Urinary Frequency
  - Pain with increasing urgency
  - Others – Burning, Dyspareunia

- Hard to dx- Not much is truly known
  - Diagnosis time : 5 to 7 years
  - Many providers and patients unaware
Obstetric Complaints

- Nerve Compression
- Tendonitis
- Sciatica
- Difficulty/Pain with Gait
- Pelvic Pain
- Postpartum Issues
Urinary Incontinence can stand alone or go hand and hand with CPP

- 12-25 million Americans have bladder control problems 85% are women.
- Out of 3 million women who have vaginal deliveries each year up to 30% will develop UI. (Goldberg)
- Overactive bladder affects 25% of women of reproductive age. (Davila)
- Chronic UI is a major cause of older adults being institutionalized in the U.S. (Brown)
Quality of Life

* When you get up 5-7 times at night to use the bathroom?

* Get in trouble at work for taking too many breaks to use the bathroom

* Avoid social outings or intimacy due to urinary leakage

* Embarrassed to talk about it
General Screening Questions

- **Bladder Screen**
  - Do you have any urinary leakage?
  - Do you lose urine when you cough, laugh, lift, or sneeze?
  - Do you get up to go to the bathroom at night when you are sleeping? If so how many times?
  - How long are you able to delay the urge to urinate?
  - Do you have any trigger that make you have to go to the bathroom?

- **Intercourse**
  - Are you sexually active?
    - Preferred partner
    - How often
  - If no, is pain or other physical problems stopping you?
  - If so, do you have any pain or problems during intercourse?
  - Don’t age discriminate- people over 65 have sex

- **Bowel Screen**
  - How often do you have a B.M?
  - What does it look like?
  - Are you Constipated
  - Blood in stool
  - Leakage
Screening and Outcome Measures

- Observe
- Posture and Body Mechanics
- Palpate the pain
- Can you reproduce it?
- Range of motion/Manual Muscle Testing
- Scar assessments
- Pelvic Girdle Pain Questionnaire
- PFDI-20 Pelvic floor Distress Inventory
- Others
Who refers Pt

- Primary MD
- Internal Medicine Doctors
- OB/GYN
- Urologists
- Urogyn
- Colo-Rectal
- Nurses
- Midwives
- Physician Assistants
- Nurse Practitioners
- Depending On MD depends on work-up
All These Issues Can Be Treated

A Multidisciplinary Approach offers the best outcomes.
Multidisciplinary approach

- Many disorders contribute to CCP; an integrated multidisciplinary approach to Dx and Tx is essential to achieve the greatest success.

Methods: Review Literature and determine efficacy of PT interventions

Results: PT treatment of CPP is an integral component of treatment that includes a multi-disciplinary approach
Physical Therapy Can Offer So Much

- Anytime
- Pregnancy
- Postpartum
- Menopausal
- Pre and Post Surgical
- Chronic Pain
Physical Therapy TX

- Biofeedback
  - Tactile
  - SEMG
  - RTUS

- Stretching
- Strengthening
- Bowel and Bladder assessments
- Dietary Guidelines for Proper urination and B.M’s
- Soft Tissue manipulation
- Myofascial Release
- Trigger Point Release
- Mobilization- Soft Tissue, Joint, Visceral and Scar
- Neuromuscular re-education
- Dry Needling
- Relaxation Techniques
- Muscle Energy Techniques
- Body Mechanics and Posture
- Ergonomics
- Modalities
- Stabilization
- Dilators, Braces, Supports and Taping
Behavioral

- Bladder Diary
- Timed Toileting
- Dietary Education
  - Fluid management
  - Fiber education
  - Bladder irritants
- Urge Protocol
- Voiding Mechanisms
## Bowel and Bladder Diary

<table>
<thead>
<tr>
<th>Time</th>
<th>Liquid Intake</th>
<th>Food</th>
<th>Bladder</th>
<th>Bowel</th>
<th>Leakage</th>
<th>Activity</th>
<th>Pain/ Urge</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00am</td>
<td>2 cup coffee</td>
<td></td>
<td>10 sec</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:00am</td>
<td>Bagel/ cr. cheese</td>
<td>4 sec. 2 sec</td>
<td>*</td>
<td>1- Small Med</td>
<td>Sit to stand</td>
<td>U - 5</td>
<td></td>
</tr>
<tr>
<td>8:00am</td>
<td>Tea- 1cup</td>
<td>4 sec</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00am</td>
<td>2 cups coffee</td>
<td>5 sec</td>
<td>Small</td>
<td></td>
<td></td>
<td>Coughing</td>
<td></td>
</tr>
<tr>
<td>10:00am</td>
<td></td>
<td>3 sec</td>
<td>Small</td>
<td></td>
<td></td>
<td>Sneezing</td>
<td></td>
</tr>
<tr>
<td>11:00am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00pm</td>
<td>Diet Coke</td>
<td>Hamburger/ FF</td>
<td>8 sec.</td>
<td>Small</td>
<td></td>
<td>Going to bathroom</td>
<td>U - 10</td>
</tr>
</tbody>
</table>
Some studies have found that more than 30% of female patients cannot voluntarily identify and contract their pelvic muscles effectively.
Biofeedback
Real Time Ultrasound
Use of Trans-abdominal ultrasound imaging in retraining the pelvic-floor muscles of a woman postpartum

October 2008
Dry Needling

* NOT Acupuncture

* Special Training

* Trigger Point Release

* Legal in Illinois and some Others states
Individualized Home Exercise Program

- Personal Responsibility / Patient Buy In
- Exercise Routine
- Cardiovascular Exercise
  Walking/ water walking
- Toileting/ Leakage Strategies
- Diet
- Stress Relief
- Pain Management / Tool Bag
- Referrals
  - Psychology
Case 1 – Jackie
Multiple Sclerosis with 4 year HX of Rectal Pain
Case 2 - Sarah Chronis Pelvic Pain and Endometriosis
Case 3- Dan
Posterior Pelvic Pain and unable to tolerate sitting
How to find a Pelvic Floor Therapist

* APTA
  * [www.apta.org](http://www.apta.org) – Find a therapist

* Herman and Wallace Pelvic Rehabilitation Institute
  * [www.hermanwallace.com Practitioner Directory](http://www.hermanwallace.com)

* Section on Women’s Health of the APTA
  * [Womenshealthapta.org](http://www.womenshealthapta.org) – find a therapist

* Chicagoland Pelvic Floor Research Consortium
  * [www.cpfrc.com](http://www.cpfrc.com)
  * Member fees $18.00

* Other organizations like
  * [www.ic-network.com](http://www.ic-network.com)
  * [www.pelvicpain.org](http://www.pelvicpain.org)
Resources

* www.augs.org
* www.issvd.org
* www.ichelp.org
* www.ic-network.com
* www.nva.org
* www.pelvicpain.org
* www.vaginimus.com
* www.womenshealthapta.org
Questions???

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