The Lumbopelvic-Hip Complex
The Pop Can Principles

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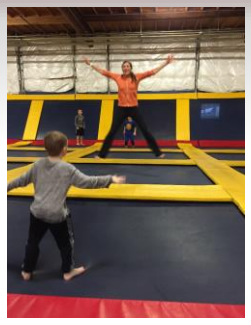
Desired Outcomes Roadmap

- Understanding of the **complexity of lumbo-pelvic system** through the lens of a pelvic floor physical therapist
- Identify **Key Risk Factors** in lumbopelvic orthopedic patients that may be drivers of pelvic floor dysfunction.
- Awareness of **assessment** indicators of disruption to the lumbopelvic system
- Understanding of **diagnoses treated** via Pelvic Floor Physical Therapy
- Familiarity with **interventions** of pelvic floor physical therapy including ultrasound imaging, Internal Examinations through case studies
- Knowledge to educate patients adjuncting with pelvic physical therapy treatment and **instill change** through collaboration with pelvic floor physios.

Practice What You Preach. Period.

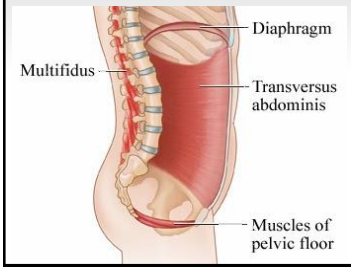


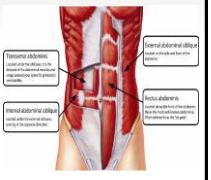
CLINICAL PEARL:
25% will address PF with a healthcare provider (Hannestad et al 2000)

The Pop Can- Local and Global Stabilizers

LOCAL STABILIZERS

GLOBAL STABILIZERS

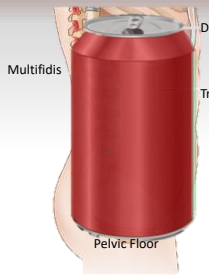




Pop Can- Local Stabilizers

- Primary Stabilizers
- *Clinical Pearl: Pain, Dysfunction and Incontinence can result*
- Strong association of breathing and continence disorders with low back pain. (Smith et al 2006)

Pop Can- Local Stabilizers

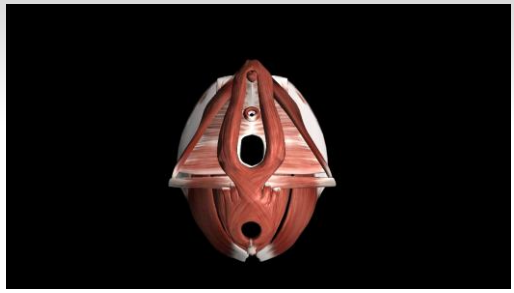


- Increased Pressure
- Disruption
  - 62 percent of women with a DRA have at least one pelvic floor support related dysfunction (UI, FI, POP) (Spitznagle et al 2007)
- Local is anticipatory before global (Hodges et al 1997, 1999, 2007)

Complexities of the Lumbopelvic System

- 92 percent of women with UI 12 weeks post-partum remain at 5 years (Viktrup et al 2000)
- 55 percent of women over 65 have UI (Herschorn et al 2003)
- One vaginal delivery increases risk of POP by 4 fold, two babies- 8.4 fold (Mant et al 1997)
- Thoracic kyphosis increases the risk of pelvic organ prolapse (Mattox et al 2000)

Anatomy 101

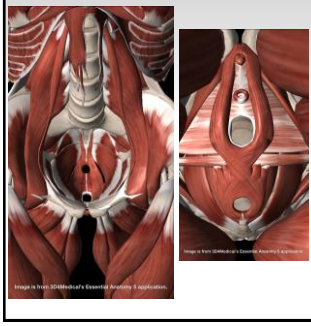


Alphabet Soup

HERMAN&WALLACE
pelvic rehabilitation institute

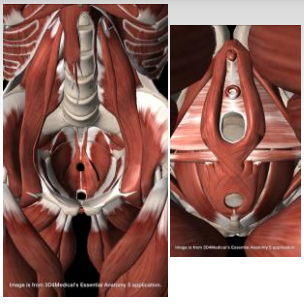
- Certified Pelvic Rehab Practitioner (1/232 in U.S)
- Pelvic Floor Therapist Since 2002
- Intrapartum PT trained
- Board Certified Orthopedic Clinical Specialist
- North American Institute of Manual Therapy Certified Manual Physical Therapist
- Rehabilitative Ultrasound Imaging
- Section On Women's Health Member of the American Physical Therapy Association
- Continuing Education Junkie > 120 classes
- Mother of 2 sons

The Pelvic Floor



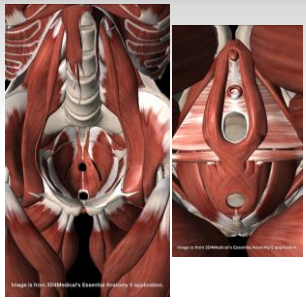
- 25 percent cannot kegel
- Exhausted efforts
- Muscles tighten to meet demands

The Pelvic Floor



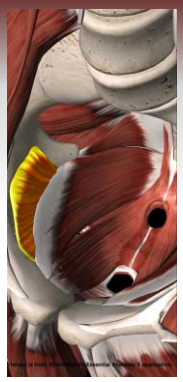
- More than strength needed
  - Coordination
  - Eccentric strength
  - Maximum contraction
  - Repeated contractions
  - Tonic hold
- 50 percent sustain some type of pelvic floor change post delivery. (Dietz 2013)
- 50 percent of parous women have some loss of pelvic organ support (Hagen and Stark 2011)

The Pelvic Floor



- Elite Athletes > 50 percent may experience UI during sporting activities (Bo et al 1989)
  - Gymnastics and Ballet (Thyssen et al 2002)
- 0 to 80 percent of sports, young, nulliparous, elite athletes UI
  - Highest in gymnastics, track and field, some ball games (Bo 2004)
- Now = Later (Bo &Sundgot-Borgen 2010)

Obturator Internus



- Pelvic wall
- Pelvic floor attaches via tendinous arch
- Concominant pelvic floor pain (Hunt et al 2007)
- Core and Pelvic Floor Control for PT rehab (Harris 2016)

Hypertonic

- Tampon use painful
- Pain with Intercourse/gyn exams
- Constipation
- Difficulty urinating/urinary symptoms
- Coccyx pain
- Abdominal Pain
- Incontinence

SUBJECTIVE
Slits in the Pop Can

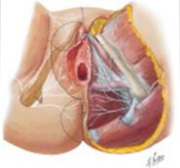
- The 5 S's
  - Sphincter Control
  - Support Bladder
  - Support Spine
  - Sexual Function
  - Sump Pump

- Disc herniation
- Hemorrhoids
- Episiotomy/Caesarean delivery
- Pelvic Lacerations During Delivery
- Abdominal Hernia
- Previous abdominal or back surgery
- Scoliosis
- TMJ

Detective…

Assessment From a Pelvic Floor PT View

- Comprehensive Subjective (60-90 minutes standard)
- 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
- PUT THE WHOLE PICTURE TOGETHER!



LBP with SUI

34-year old patient recreational triathlete, low back pain discloses also has some stress incontinence

- Aggravated by cough/sneeze
- Painful insertion of tampons
- Painful intercourse
- Constipation
- Emergency Hysterectomy s/p last child which she lost at delivery

It takes a woman an average of 6 years to talk to a HC provider about it.

Athlete with Urge Incontinence

Marathon Runner being treated for hip pain, experiences leakage, incidences occur with urge to use the restroom (every porta potty she runs by)

-Walks in with Coffee/Starbucks

-G4P4 vaginal deliveries with forceps for first delivery

-Post-void residual

SI Dysfunction

Sacroiliac joint pain, 59 years old, pain provoked largely with walking, standing, unresolving

- Pain worsens during the day, lying down in the afternoon palliates it
- Hysterectomy in 1999
- Requires leaning backward on the stool to defecate and taking miralax for constipation daily; frequent bladder infections

LBP in Pregnancy

31 year old, patient with achilles injury tells you she is 12 weeks expecting mom!

-Discouraged she is already leaking

-Patient leakage resolves at 16 weeks

- Patient returns 1 year after her delivery

-Leakage returned at 30 weeks

-Still leaking at present

-Had a 4th degree pelvic floor tear

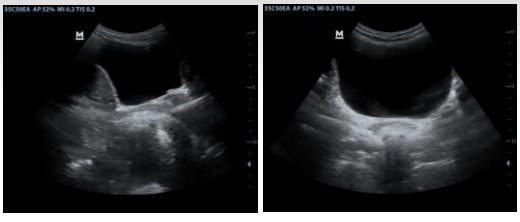
-Has fecal incontinence

Hip pain with SUI

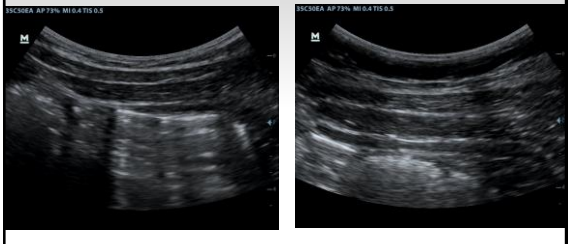
- 32-year old female elite athlete, G0P0, FAI, plateaued in progress
  - Normal BMI, abnormal menstrual cycle
  - 8 years SUI with running
  - Fall 2 years ago onto coccyx when fell in a race
  - Constipation progressive x 8 years

If they have UI early in life, it's a strong predictor later in life (Bo & Sundgot-Borgen 2010)

Pelvic Floor Recruitment



How Different They Behave



Pelvic Pain: The Facts

- 1 of 7 American women between the ages of 18-50 experience pelvic pain
- 61% patients with pelvic pain have no "diagnosis"
- Pelvic pain accounts for 10% of OBGYN visits, 20% of laparoscopic surgery and 12-16% of hysterectomies (http://www.pelvicpain.org/pdf/CPP_Pt_Ed_Booklet.pdf)

Pelvic Pain

48-56% of patients with chronic pelvic pain have a history of abuse.

(Leserman 2005)

Urinary Incontinence By the numbers…

- **8th** most prevalent chronic medical condition among women in the United States.
- **32.1 billion dollars** spent annually on pads, laundry and caretaking and medical costs…for only OAB and UI (Hu et al 2004)
- Incontinence is second most common reason for admission to assisted living

Clinical Application

- Pt with 10 yr history of mixed UI using 4 generic pads per day to manage symptoms, taking Ditropan (extended release, 1x/day)
  - Total cost of pads = $2,966
  - Total cost of medication = $8,270
  - **Total cost = $11,236**

Disarming Questions To Motivate Change

What would be the advantage to NOT addressing your _____(insert incontinence, sexual dysfunction, pelvic pain)?

Research shows…
Some of my patients say…
What we generally recommend is…

Jessica Dorrington, PT, MPT

Board Certified Orthopedic Clinical Specialist
Certified Manual Physical Therapist
Certified Pelvic Rehabilitation Practitioner
Certified Strength and Conditioning Specialist
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