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.

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**Practice What You Preach. Period.**

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

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**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)

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**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)

Alphabet Soup

- Certified Pelvic Rehab Practitioner (1/232 in U.S)
- Pelvic Floor Therapist Since 2002
- Intrapartum PT trained
- Board Certified Orthopedic Clinical Specialist
- 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

- 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

- 25 percent cannot kegel
- Exhausted efforts
- Muscles tighten to meet demands
- 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)
THE LUMBOPELVIC-HIP COMPLEX
THE POP CAN PRINCIPLES

Obturator Internus

- Pelvic wall
- Pelvic floor attaches via tendinous arch
- Concomitant 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...

- Disc herniation
- Hemorrhoids
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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.
**THE LUMBOPELVIC-HIP COMPLEX**

**THE POP CAN PRINCIPLES**

**JESSICA DORRINGTON, PT, MPT, CMPT, PRPC, CSCS**

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**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

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**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)

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**Pelvic Floor Recruitment**

**How Different They Behave**

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10/17/2016
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

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...

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Certified Manual Physical Therapist
Certified Pelvic Rehabilitation Practitioner
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