Pelvic Health Physical Therapy 3.19.19 Thank You to host: Transformation Center
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Objectives

1. Appreciate normal anatomy & physiology of pelvic floor muscles
2. Understand prevalence of & risk factors for pelvic floor dysfunction
3. Learn tips to support bladder/bowel function & pelvic organ position
4. Describe benefits of conservative treatment options
5. Demonstrate **three key exercises** to prevent pelvic floor dysfunction

Quiz: True/False

It is normal to void 10-12x/day - F
Bladder size decreases with age - F
A proper kegel exercise involves contracting the pelvic floor and glute muscles - F
Body awareness training reduces pain - T
Blood flow in muscles affects pain - T
A predictor for back/pelvic pain during pregnancy is prior back/pelvic pain - T
Biofeedback involves delivery of electrical stimulation to the muscles - F
Ab crunches are an effective deep core strengthening exercise - F

Normal Bladder Physiology = Reflexive. Storing Phase Filling = outlet muscles & pelvic floor *slightly* contracted, bladder muscle relaxed. Emptying Phase Voiding = Pelvic floor muscles relax, bladder muscles contract. Goals for Normal Function: Encourage brain to be "boss" (not other way around). Encourage relaxation/autonomic nervous system (rest & digest) balancing measures. Bowel operates like bladder but adds abs for emptying.

Floor Muscle (PFM) Anatomy - What Happens with PFM dysfunction? [5,6,7,8]

Females = **Incontinence**/ Constipation, Pain, Pelvic Organ Prolapse (POP), Sexual dysfunction
Males = Incontinence/ Constipation, Pain, Erectile dysfunction (40%)
Children = Incontinence/Constipation, Pain

Underactive/Incoordination Pelvic Issues

Incontinence, Diastatis Recti Abdominus (DRA), Pelvic Organ Prolapse (POP)

What is Incontinence? Involuntary leakage of bladder/bowel (sm/lg, drops to soaked)

Urge Incontinence (Overactive Bladder): Bladder contracts when it shouldn't, Leakage plus strong, sudden urge – can't make it to bathroom on time; "key in door"/running water phenomenon
Stress Incontinence: Leakage during ↑ intra-ab pressure (e.g. stand up, jump, run, lift, cough)
Incontinence is Common, NOT normal. *Bowel Incontinence:* Involuntary loss of stool or flatus (gas)

Bladder & Bowel Control Risk Factors: ↑ BMI, High impact exercise (running, gymnastics, volleyball, etc.), Pregnancy, Surgery/trauma, Depression, Osteoarthritis, Diabetes, COPD/emphysema, Asthma/allergies, Low estrogen (___ = Modifiable)

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Bladder Leakage Prevalence: 13-40% never pregnant, 30-80% post-partum, 40-50% menopausal women. 40% also have bowel incontinence. 25% significant bowel dysfunction post-partum. Only 1 in 3 women seek help. 11% men and most with urge incontinence due to prostate, surgical, or neurologic issue.

Impact of Bladder & Bowel Incontinence: Traditional Treatment - Financial (2015) Personal costs: U.S. avg per person cost: $1382 (If surgery: $3620 with potential side effects or return of symptoms). $16.3 Billion dollars. Adverse side effects - Bladder/bowel meds can ↑ dehydration in runners/endurance athletes. Cost of non-treatment – Depression, Isolation, Negative self-image, Anxiety/frustration, Skin breakdown & infection, weight gain, back pain.

Incontinence Myths & Facts: The bladder does NOT shrink with age. Incontinence is NOT an inevitable part of having babies. Female athletes (as young as 15) participating in impact (running/jumping/dance) sports have a 30-80% risk for bladder/bowel control issues.

Diastasis Recti Abdominus (DRA) = vertical separation in tissue between "six pack" abs. Symptoms: often none; occasional strain/tearing sensation at navel. Affects 70% women & 30% men. Synergistic function of pelvic floor & abdominal wall is key to healing (Spitznagle et al., 2007). 66% of females with DRA also have incontinence POP. 75% of women w back & pelvic girdle pain have a (+) finding of DRA. Rehab hinges on quality re-education of pelvic floor and low abs.
POP = Pelvic Organ Prolapse. Estimated lifetime risk severe 11% (U.S.) – Types: Uterine, Bladder (Cystocele), Rectum (Rectocele), Enterocele (intestine), Urethra (Urethrocele), Vaginal. Risk Factors: Age, Fam history, Freq coughing*, Overweight/obese*, Heavy lifting*, Constipation*, * = Modifiable

'Overactive' Pelvic Floor Challenges:
Constipation Tips: hips LOWER than knees & feet supported. 2T flax seed daily. Utilize relaxation, meals, and first wake reflexes.
Painful Bladder Syndrome: Affects 7% women. Often coincides with Fibromyalgia, Irritable Bowel Syndrome (IBS). **IPPS (pelvicpain.org) has excellent resources!
Pelvic Pain: affects 39% of all women. Pain may be local or referred, often driven by: muscles & associated blood flow, nerves, bones, ligaments, cartilage/joint lining, inter-vertebral disk, organ. Risk factors: trauma/surgery (falls, adhesions/scar tissue (episiotomy, Cesarean delivery). 80% due to muscle imbalance, Chronic poor posture, Endometriosis, Anxiety/emotional stress, Fistulas, Fibromyalgia, Irritable Bowel Syndrome (IBS), Interstitial Cystitis (IC), Pelvic inflammatory disease (PID)
'Traditional' Medical Treatments for Pelvic Floor Dysfunction:
Incontinence/POP: Meds, Surgery, Pessaries (many types) for POP. DRA: watch & wait; surgery if severe and/or done having children. Constipation: stool softeners, laxatives. Pelvic Pain/Painful Bladder: Medications, injections, surgery.
Conservative Pelvic Health P.T. Treatment
Benefits = Natural = Working with body's own natural healing processes. Based on anatomy & physiology. Uses sensory system to boost body awareness & enhance nervous and musculoskeletal system balance. Highly Effective!

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Incontinence: 85% see significant improvement/recovery. DRA 85% improvement/resolution in 2-8wks. Painful Bladder: 60% resolved http://www.ichelp.org/page.aspx?pid=433. Pelvic pain: 70% resolved with pelvic PT. POP: appropriate if mild to moderate

Who can help? Well trained & experienced pelvic physical therapist (PT) who treats comprehensively, look for credentials (advanced training/certification): BCB-PMD, WCS, CAPP. WI is a direct access state.

What does comprehensive treatment consist of?

Initial visit = Medical history/goals/values, Internal Pelvic PT Exam = Gold standard

Behavior Modification: EMG Biofeedback enhances brain-body connection, Education (normal A&P, self-care tips, fluids, nutrition), Specific Exercise, Manual Therapy, Nutrition – Irritants (caffeine, alcohol, chocolate, spicy or acidic foods), Fluids (Aim for straw yellow colored urine). Bladder habits - Avoid "JICing" (going Just In Case). Urge Suppression Tips – Distraction, 'The Knack'. The Power of the Breath - Promotes relaxation/ANS quieting, Promotes normal organ function (physiology), Reduces pain - especially when sleep deprived. **Breathing exercise demo: diaphragmatic & square breathing**.

Kegel 101: A proper Kegel includes a Squeeze + a Lift . **Kegels Three Ways (Quick Flicks, Submax Hold, Power Hold).** *Aim for body posture (laying down, sitting, or standing) where all three key types of pelvic floor muscle contractions can be done with quality isolation.* **Aim for 5x, 2x, and 2x, of each respectively, 3x/day to start**. Work up to gently including submax hold with **core exercise (eg. marches, knee fallouts, bridges, bird dog on hands/knees)**. *If you are not breathing you are not working your core! Pelvic and respiratory diaphragms work in concert – this is normal anatomical function.*

Pelvic floor health → global health by normalizing function = Sphincter closure pressure, Supports organs during upright & impact activity, Sexual health (blood flow & relaxation are essential)

Research: Systematic lit review: specific exercise is effective for treatment & prevention of pelvic pain in pregnant women (Boissonnault & Klestinski). Internal manual therapy reduces pelvic pain more effectively than exercise or biofeedback alone. Visceral Manipulation (VM) targets blood/lymphatic flow, local physiology/function, and pressure gradients in/around pelvic organs. VM is a gentle, hands-on techniques to improve pelvic organ mobility & motility. It improves blood & lymphatic flow, reduces pain, supports fertility. VM is appropriate for those with history of pregnancy, surgery, trauma/injury.

CoreActive is passionate about comprehensive, *client focused* care. Board certified Women's Health Clinical Specialist & Orthopedic Clinical Specialist. 10% charitable giving annually to causes specific to women/families and future of healthcare/education. We offer Ms Fit Therapy™ core + pelvic floor training classes and workshops.

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