THE SPORTS CLINIC

TAKING CONTROL OF YOUR BLADDER AND PELVIC FLOOR

Christina Moores, BScKin, MScPT, CAFCI, DipManipPT, FCAMPT
Registered Physiotherapist

Rachel Schwindt, BScKin, MScPT, CMAG
Registered Physiotherapist

WORKSHOP OBJECTIVES

- Recognize the signs of voiding dysfunctions and urinary leakage
- Outline risk factors of pelvic floor dysfunction
- Understand basic anatomy and functions of pelvic floor musculature
- Identify the types of urinary incontinence (UI)
- Discuss types of pelvic organ prolapse (POP)
- Quick outline of common pelvic pain conditions
- Receive tips on how to locate/contract the pelvic floor muscles (PFM)
- Discuss the benefits of pelvic floor muscle (PFM) strengthening and what a basic program looks like
- Identify when to see your doctor
- Discuss how pelvic floor physiotherapy can help urinary incontinence and other pelvic floor dysfunctions
- Discuss urinary frequency and urgency and receive strategies to help ASAP

RECOGNIZE THE SIGNS

THE SPORTS CLINIC

- Do you leak urine when you laugh, sneeze, cough, or exercise?
- Do you experience post void leakage?
- Do you wear a panti-liner to hide leaks?
- Do you take note of all the washrooms wherever you go?
- Do you urinate more than 8 times per day?
- Do you "just-in-case void"?
- Do you often have a strong urge to pee?
- Do you only urinate for a few seconds? Does your flow stop and start?
- Have you had to change any physical, social or work activities because of decreased control over your bladder?
- **Do you feel pressure or heaviness in the vaginal space?
- **Do you have pain with sex, pelvic pain, low back or hip pain

RISK FACTORS FOR LOSS OF BLADDER CONTROL

THE SPORTS CLINIC

- Age (over age 40)
- Obesity
- Post-menopausal (hormone changes)
- Multiparous
- Vaginal delivery (esp. with trauma – forceps, vacuum, tearing)
- Diastasis recti
- Respiratory disease
- Recurrent UTI
- Gynecological or urinary surgery
- Chronic straining (constipation, heavy lifting)
- Post-prostatectomy (in men)
- Diet containing bladder irritants
- Medications

SOME STAGGERING NUMBERS…

- 3.3 million Canadians have UI → 1 in 4 women and 1 in 9 men (Eliasson 2008)
- 40% of primiparous women experience UI during pregnancy and 15% develop new symptoms after delivery (Glazener et al 2006)
- According to the Canadian Urinary Bladder Survey:
  - 16% of men and 33% of women over the age of 40 have symptoms of urinary incontinence, but only 26% have discussed it with their doctor
  - An individual with incontinence may spend an average of $1500/year on products
  - UI adds $1.9 billion in health care costs to the Canadian system yearly
- 2.9 million Canadians suffer from OAB (Pharmacia Canada 2002)
- UI was noted in 78% of 200 women with LBP (Eliasson 2008)

COMMON MISCONCEPTIONS

THE SPORTS CLINIC

- "It's normal to have urinary leakage after childbirth"
- "It's normal to have urinary leakage as you age"
- "There is nothing you can do about urinary leakage"

THE TRUTH

THE SPORTS CLINIC

Incontinence can be

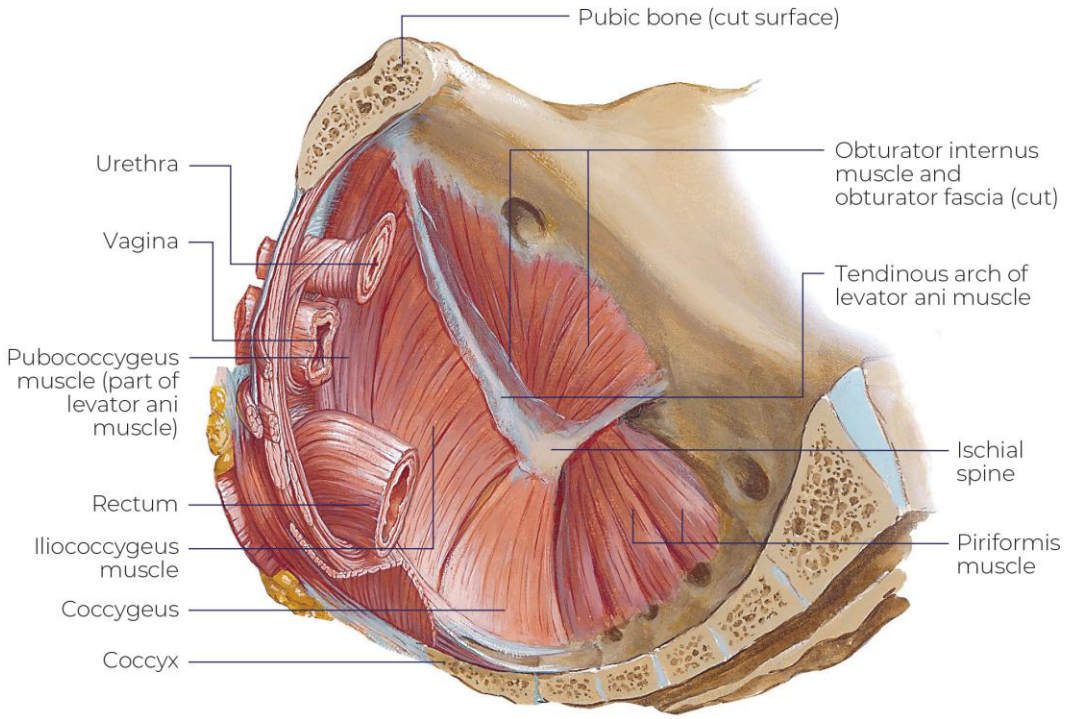
prevented, treated, and cured!!

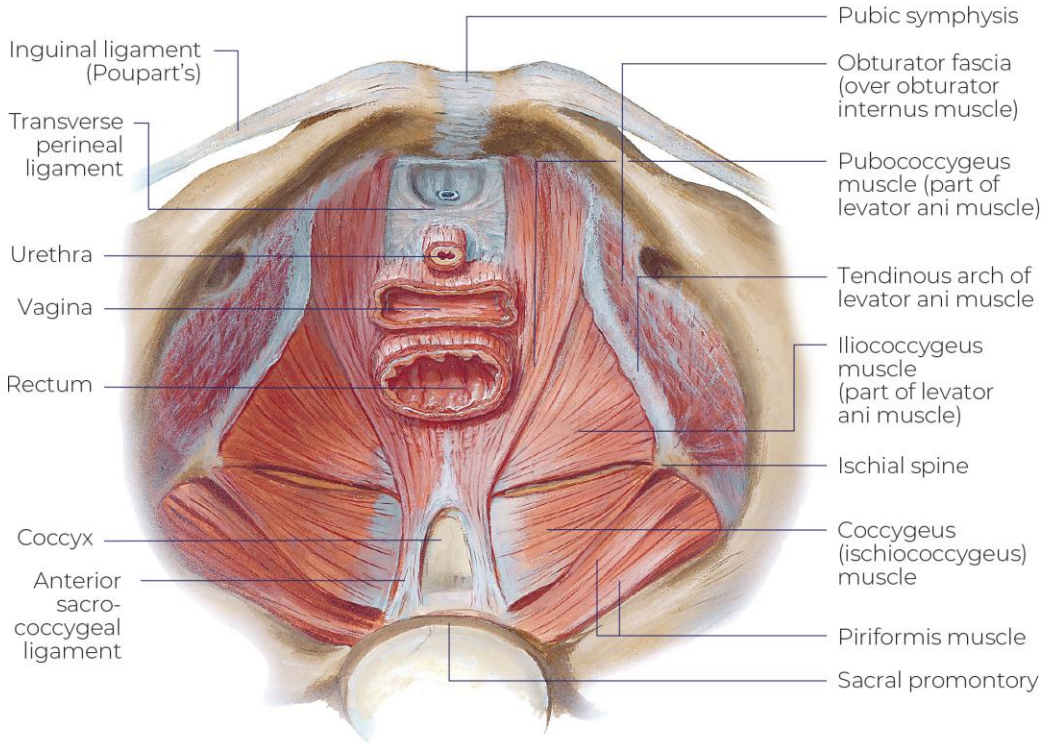
ANATOMY OF THE PELVIC FLOOR

THE SPORTS CLINIC

- Layer 1 – Urogenital Triangle (Superficial Layer)
- Layer 2 – Urogenital Diaphragm (Middle Layer)
- Layer 3 – Pelvic Diaphragm (Deepest Muscle Layer)
- Endopelvic Fascia

ANATOMY OF THE PELVIC FLOOR

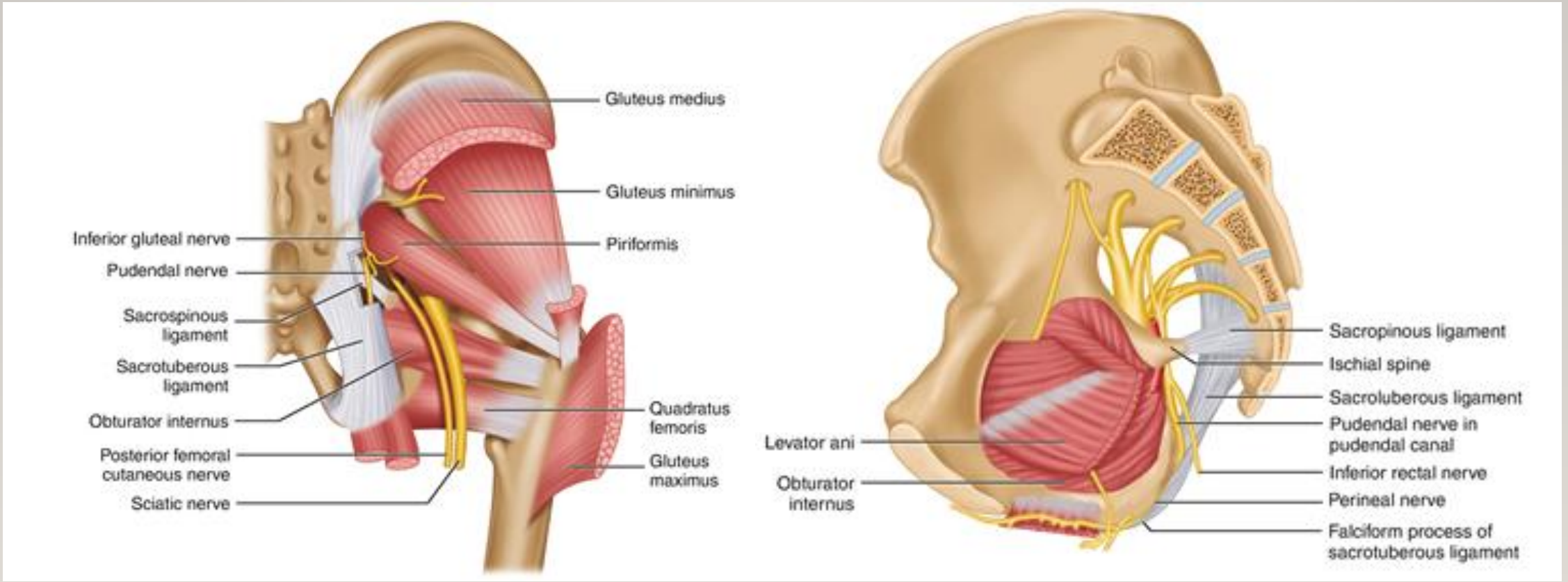




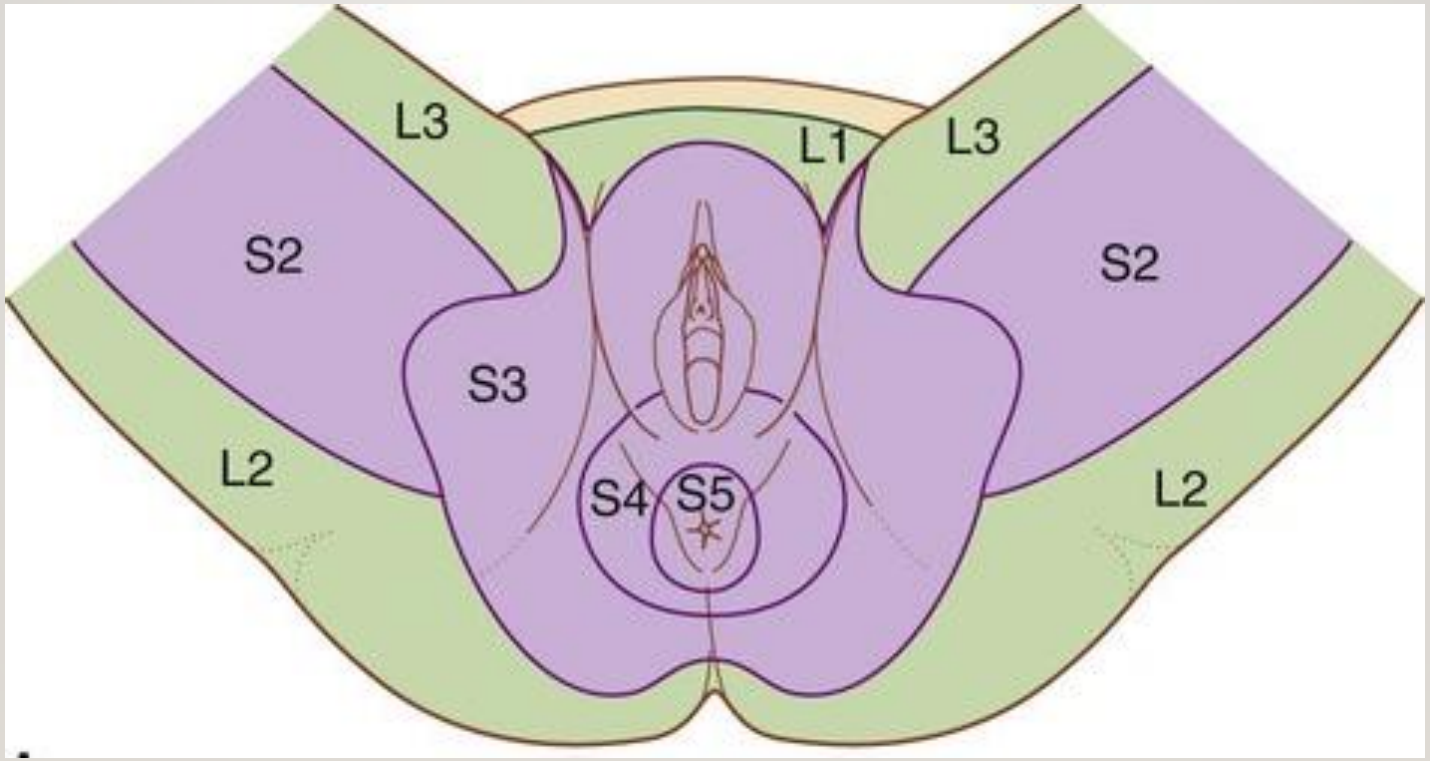
ANATOMY OF THE PELVIC FLOOR

- PFM can be injured with:
  - Bearing down during labour
  - Chronic constipation
  - Chronic cough
  - Repetitive heavy lifting at work
  - Strain of being overweight

SPOTLIGHT: OBTURATOR INTERNUS AND PIRIFORMIS

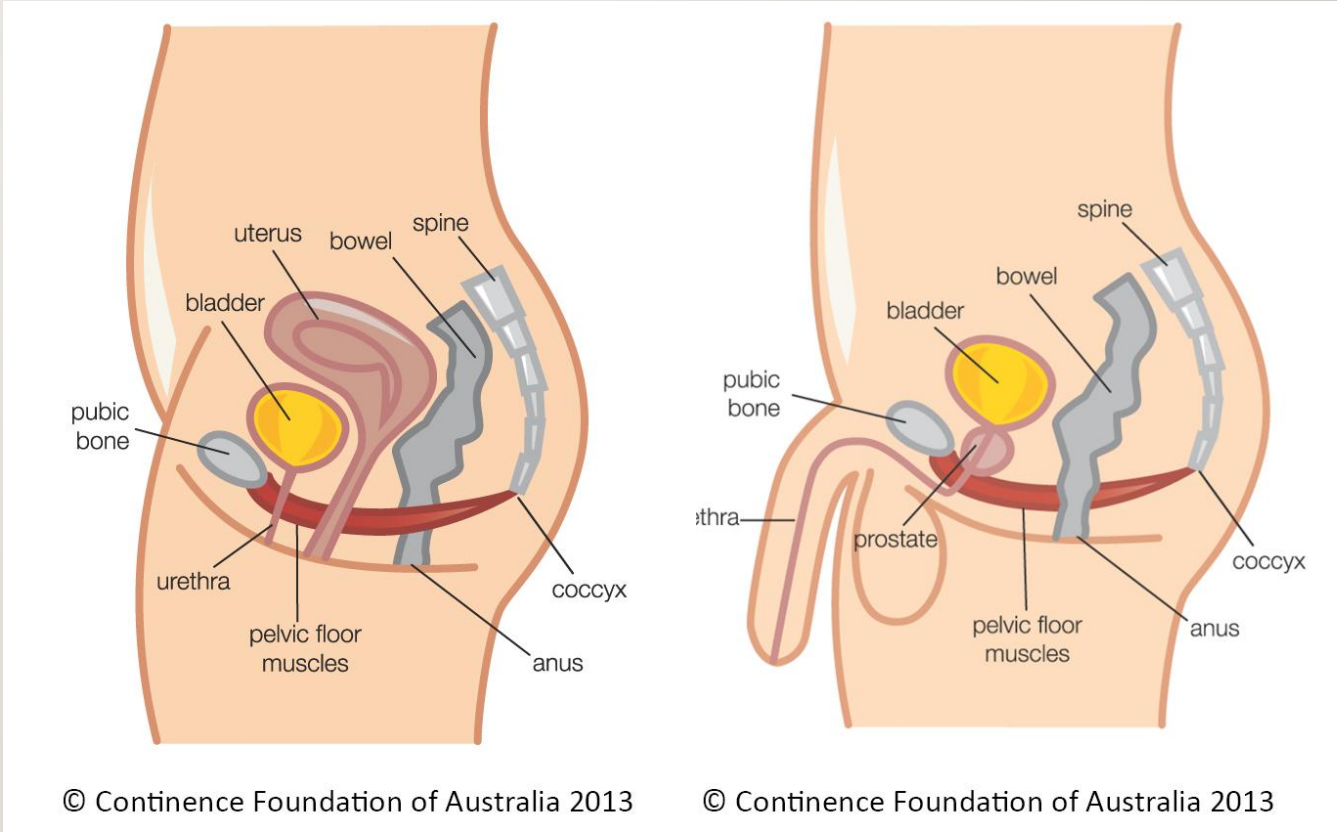


SOMETHING ELSE TO CONSIDER…



FUNCTIONS OF THE PELVIC FLOOR

- Sphincteric
- Support
- Sexual
- Stability
- Sump-pump

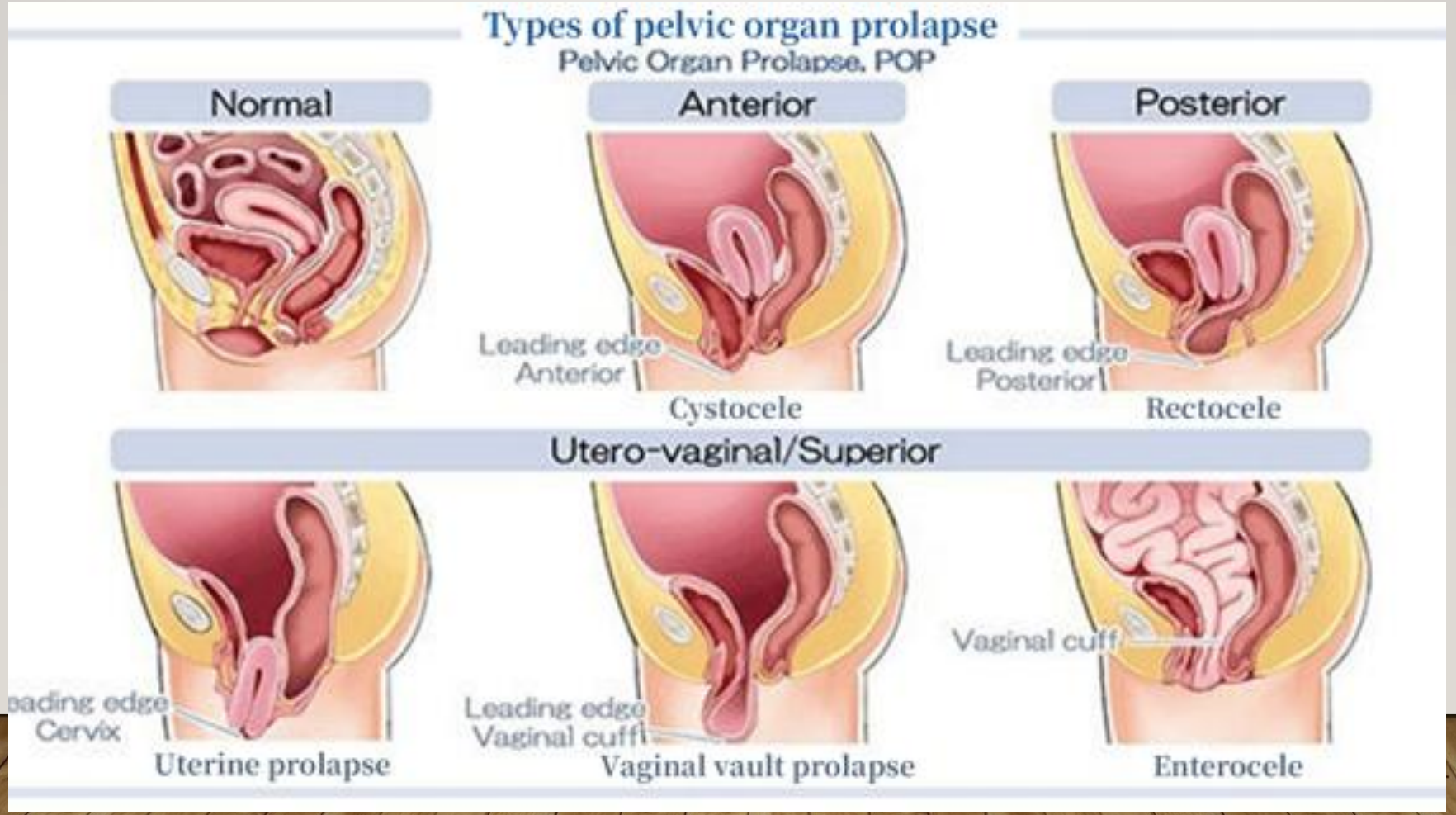


URINARY (UI) & FECAL INCONTINENCE (FI)

THE SPORTS CLINIC

- 3 Types of UI:
  - Stress Urinary Incontinence (SUI)
  - Urge Urinary Incontinence (UUI)
  - Mixed Urinary Incontinence (MUI)
- Fecal incontinence (FI)

PELVIC ORGAN PROLAPSE (POP)



Prepared by: Christina Moores, PT

QUICK SIDE NOTE: PELVIC PAIN CONDITIONS

- Vulvodynia
- Vestibulodynia
- Dyspareunia and Vaginismus
- Genitourinary Syndrome of Menopause
- Interstitial Cystitis/Bladder Pain Syndrome
- Chronic Prostatitis/Chronic Pelvic Pain Syndrome

WHEN TO SEE MY DOCTOR?

- Change in voiding pattern
  - Frequency, urgency, burning or pain with urination
- Ongoing urinary retention
- Sudden loss of bowel or bladder control, perhaps associated with back pain, saddle paresthesia
- Fever, chills
- Blood in urine
- Change in vaginal discharge
- Can palpate or see protrusion in your vagina
- Pain in vulva or vagina – unprovoked or provoked
- Pain/burning with urinating after intercourse
- New onset vaginal dryness
- Bleeding after intercourse
- Bleeding after menopause

ROLE OF PELVIC FLOOR PHYSIOTHERAPY

- Assessment of joint mobility (Tsp, Lsp, SI, hips, coccyx)
- Assessment of external and internal myofascial tissue mobility
- Assessment of pelvic floor muscle strength (internally)
- Treatment - joint mobilizations, myofascial release includes internal trigger point release, scar massage
- Provide appropriate mobility/stretching exercises
- Educate on self-release techniques - external and internal
- Assess need for relaxation vs. tightening of pelvic floor muscles
- Teach proper Deep Diaphragmatic Breathing, Core breathing
- Bladder retraining
- Education around resistance training
- Pessary Fitting – if trained
- Referral to doctors, specialists

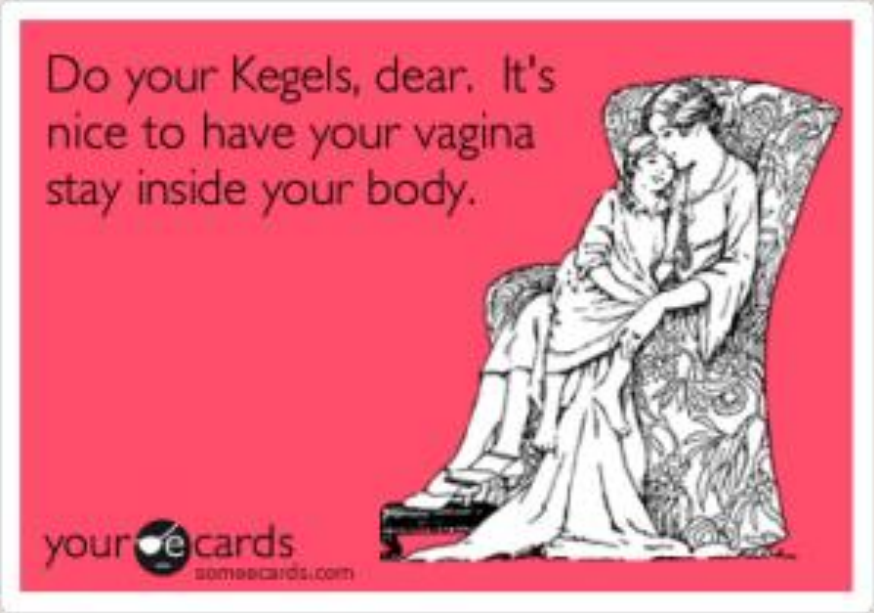
PELVIC FLOOR MUSCLE TRAINING (PFMT)

Why it works…

- Improves the quality of urethral closure and elevates the bladder neck
- This will result in an improved counter-pressure of the urethra against the pressure of the bladder
- Two main theories of mechanisms on how PFMT may be effective in the prevention and treatment of SUI (Bo 2004):
  - The Knack (timing of conscious contraction before and during an increase in IAP)
  - Regular PFMT over time builds up "stiffness/tone" and structural support of the pelvic floor
- Strong PFM contraction will also solicit a reflex inhibition of the detrusor muscle
- The long-term objective is to develop a conditioned reflex

PELVIC FLOOR MUSCLE TRAINING (PFMT)

- PFMT is the first line treatment for **Stress and Mixed Urinary Incontinence** in women (Cochrane Collaboration 2010 & 2014, 2009 ICS Conference)
- PFMT is effective and cost-effective in reducing **prolapse** symptoms and should be recommended as first-line management for prolapse (Hagen et al 2014)
- Women with **prolapse** reported improvements in control, strength and awareness of the pelvic floor, improved self-confidence, sensation of a "tighter" vagina, improved libido and orgasms, resolution of pain with intercourse, and heightened **sexual gratification** for partners after PFMT (Braekken et al 2015)



PELVIC FLOOR MUSCLE TRAINING (PFMT)

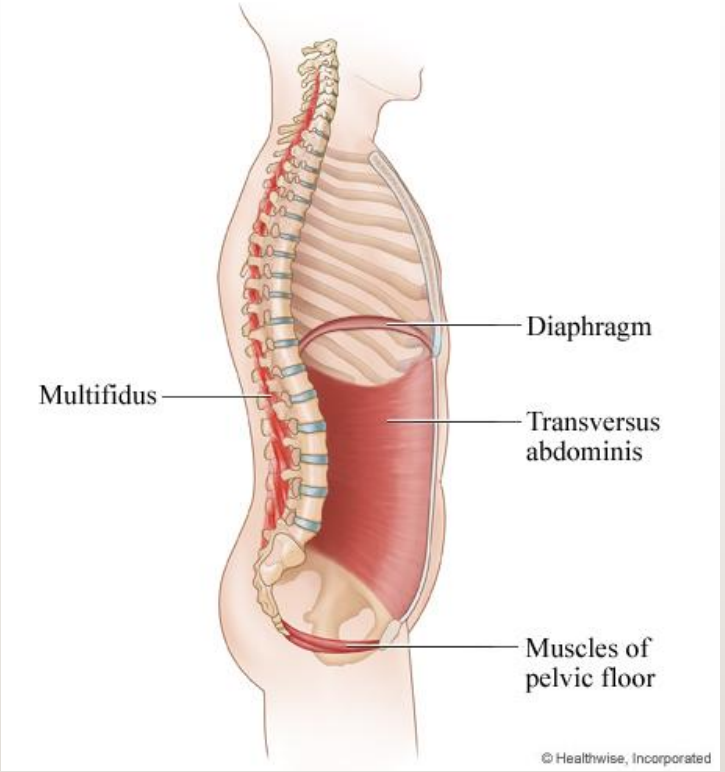
- PFMT should be completed **before any surgical intervention** is considered (2010 ICS Conference) and helps **post-operatively** as well (Pauls et al. 2013)
- Women who received intensive **antenatal** PFMT from 20 weeks gestation were 56% less likely to report UI in late pregnancy and 30% less likely to report UI by 6 months post partum (Hay-Smith et al 2008)
- Women with persistent UI 3 months **postpartum** who received PFMT were 20% less likely to report urinary incontinence 12 months after delivery (Hay-Smith et al 2008)

BUT THERE'S A CATCH…

- PFMT in studies are often supervised by PT – lots of feedback!
- Proper performance of Kegel exercises should be confirmed by digital vaginal examination or biofeedback (Society of Obstetricians and Gynecologists of Canada 2008)
- Vaginal palpation is the recommended technique for PT's to understand, teach and give feedback to patients for PFM (Bo et al 2007)
- Kegels are not one-size fits all!
- Need to release trigger points and myofascial restrictions, resolve joint restrictions and positional asymmetries FIRST

PELVIC FLOOR MUSCLE TRAINING (PFMT)

- Know how to breathe properly
- The Knack
- Isolate the pelvic floor muscles
  - Use Visualization: rectal - marble;
    vaginal - ping pong ball; urethra – raisin
  - Avoid using compensatory muscles such as gluts, adductors, abdominals
  - Nobody should know (by looking at you) that you are doing the exercise
- Never perform kegels on the toilet!



PELVIC FLOOR MUSCLE TRAINING (PFMT)

Let's all try it!

PELVIC FLOOR MUSCLE TRAINING (PFMT)

When ready for PFMT…

- Start exercises lying down
- Long Hold Contractions
- Quick Contractions
- Include rest time (equal or double)
- Individualized program – hold, reps, sets
- Progressions:
  - Increase hold duration, number of reps
  - Variety of positions and functional activities (sit, stand, squat, walk or run)
  - Do Kegel before any other exercise (ie. bridge, birddog, SL leg raise, etc)

PELVIC FLOOR MUSCLE TRAINING (PFMT)

URINARY FREQUENCY

- The need to void more than 8 times per day, and more than once during the night
- Voiding more often than every 2.5-4 hours

- Urination should take 8-10 seconds
- Frequency can lead to:
  - Decrease in bladder capacity
  - UI
  - Control over your life!

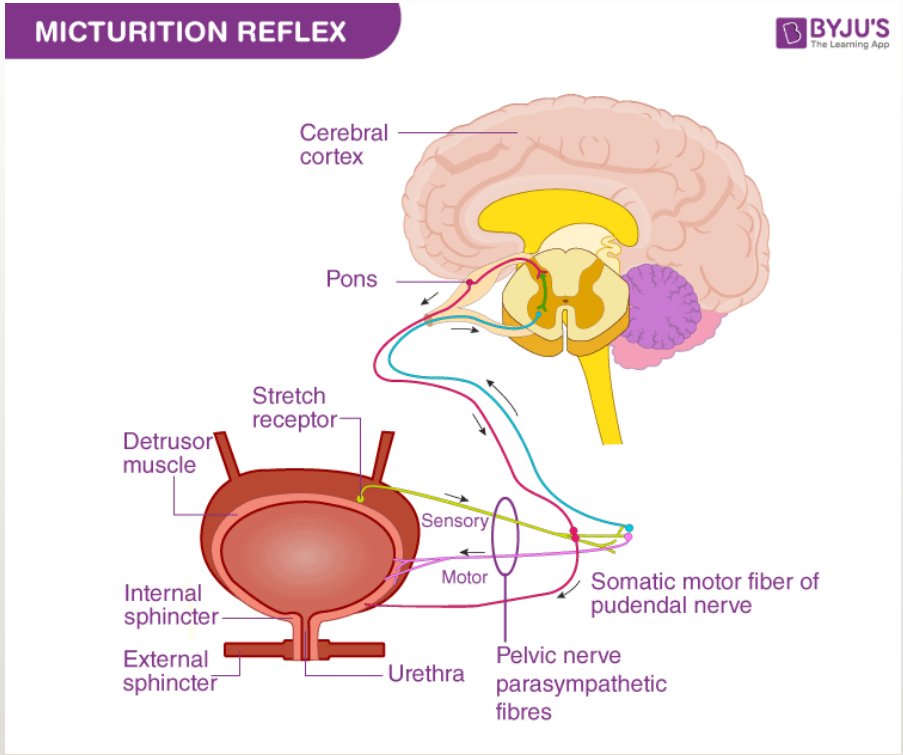
URINARY URGENCY

- The strong urge with an immediate need to void, +/- leakage
- "Overactive bladder"
- "Key in the door" syndrome
- Bladder muscle begins to contract when it should be relaxed
- May need to seek help from your physician

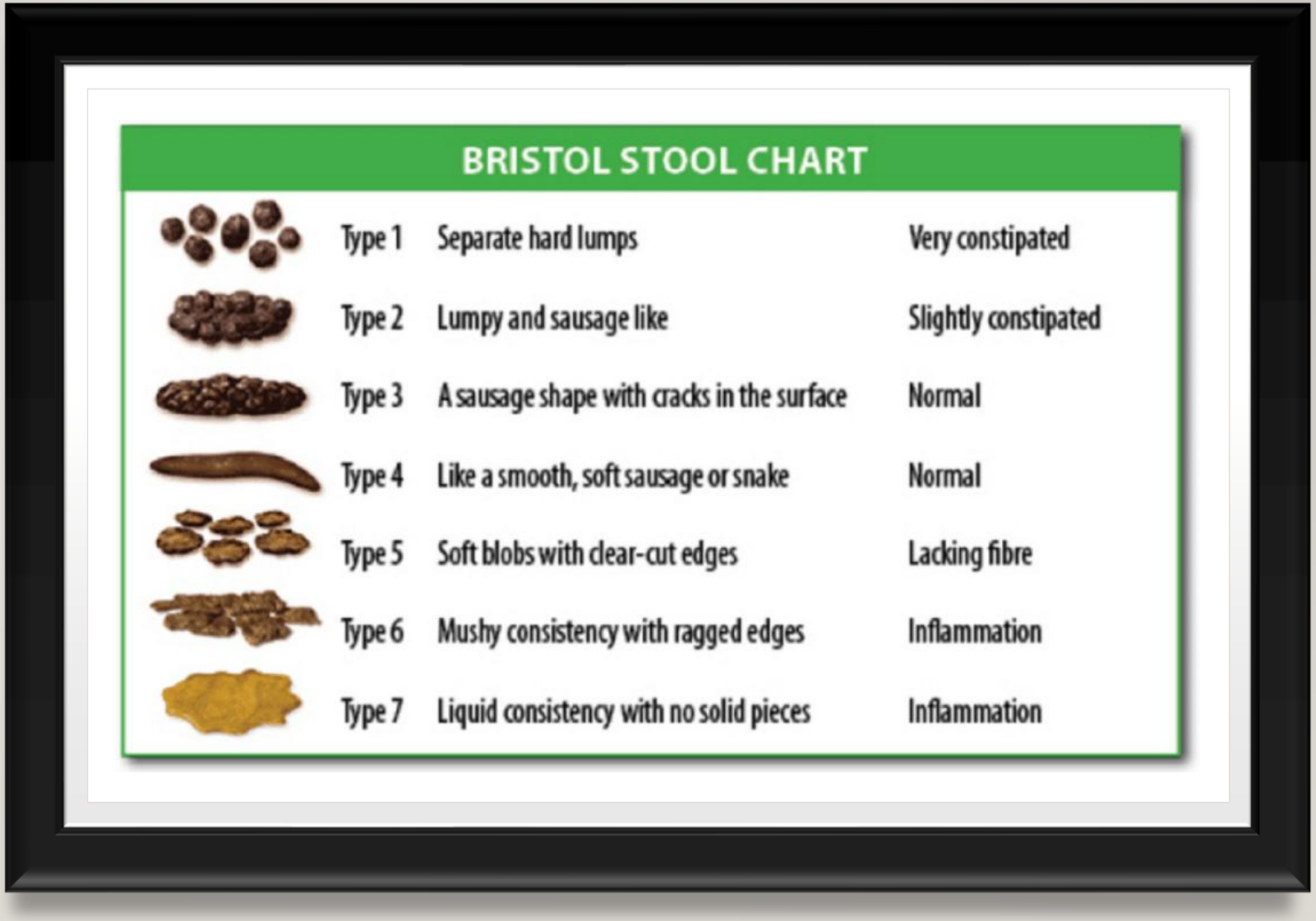
- Urgency can also lead to:
  - Decrease in bladder capacity
  - UI
  - Control over your life!

URINARY FREQUENCY AND URGENCY: STRATEGIES AND TIPS

- Bladder diary
- Limit bladder irritating foods and beverages, smoking
- DO NOT LIMIT WATER INTAKE!
- Do not "just-in-case" void
- Increase voiding intervals/timed voiding/void on 2nd urge
- Remain calm, gently contract/relax PFM, remember to breathe
- Distraction techniques
- Perineal pressure, if appropriate
- Address constipation
- Discuss medications with physician or pharmacist



SIDE NOTE: DOES MY POOP LOOK NORMAL?



QUESTIONS AND COMMENTS