

Cherry Baker Education



The Pelvic Flaw

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With thanks to Tracey Gjertsen BSc MCSP HCPC

Aims



- To Improve knowledge of pelvic floor anatomy – its not just a sling!
- To understand pelvic floor function and dysfunction in relation to us as Fitness Professionals
- To be able to educate and support clients understanding our role as a Fit Pro
- To work within National Guidelines and Cochrane collaboration research 2018
- To stop the panic and the click bait!

Do you teach isolated Kegel exercises to your clients ?



YES

Congratulation you are right if you do
for some people

NO

Congratulation you are right if you don't
for some people

If you do or you don't can they consciously engage PF and core correctly ?
Observe fit active female over recruiting and pushing down .



Pelvic Floor Dysfunction



Pelvic Organ Prolapse

Fecal Incontinence

Urinary Incontinence

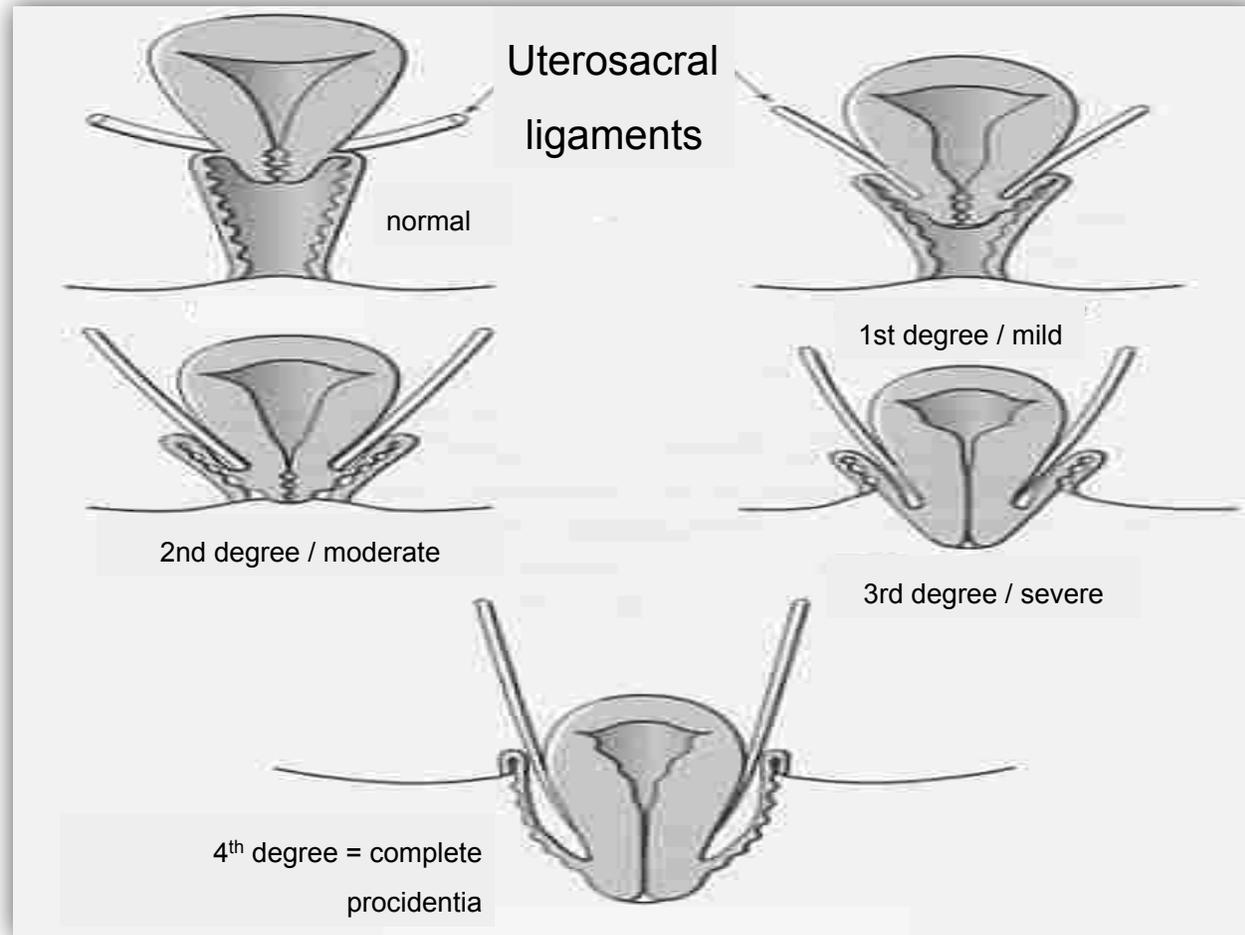
Over-Active Bladder

Frequency & Urgency

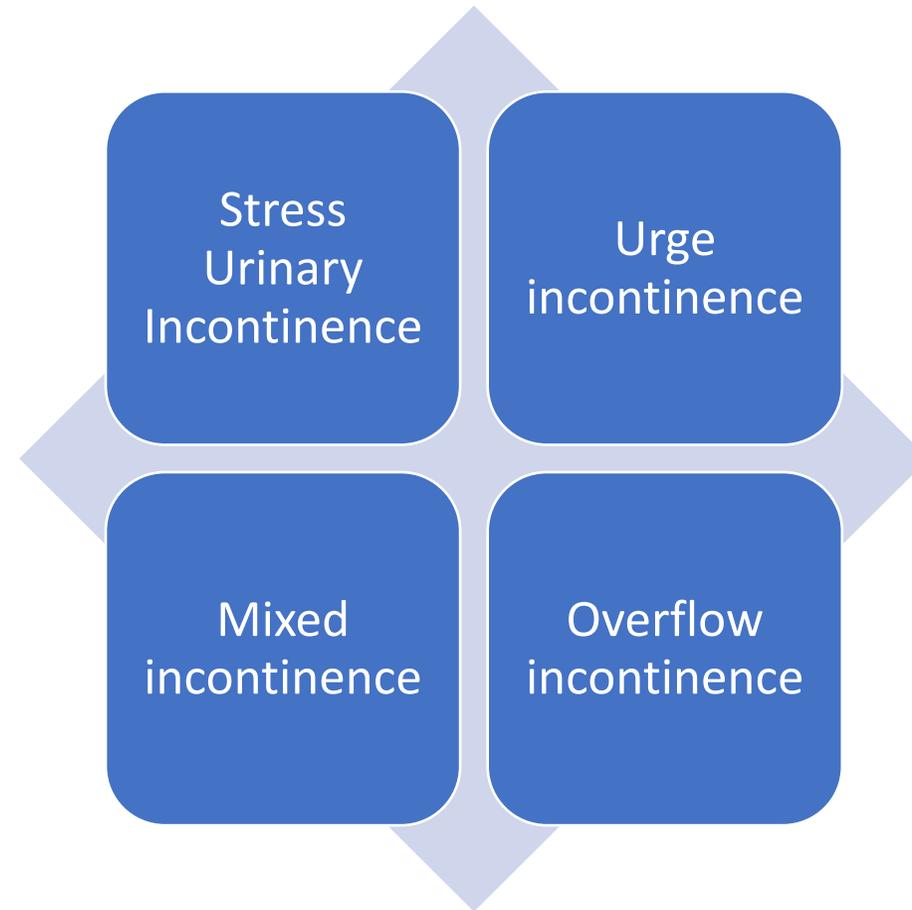
Pelvic Pain

Over-Active Pelvic Floor

Pelvic Floor Disorders



Common Types of Urinary incontinence



Causes of UI



- Pregnancy and Childbirth
- Menopause
- Heavy Lifting
- High Impact Sport
- Persistent Coughing
- Constipation
- Fibroids
- Neurological Conditions
- Obesity
- Inactivity
- Poor Posture
- Associated Pelvic Pain Conditions
- Hypermobility
- Low tone PF High Tone PF

The thing is we as Fit Pros don't REALLY know

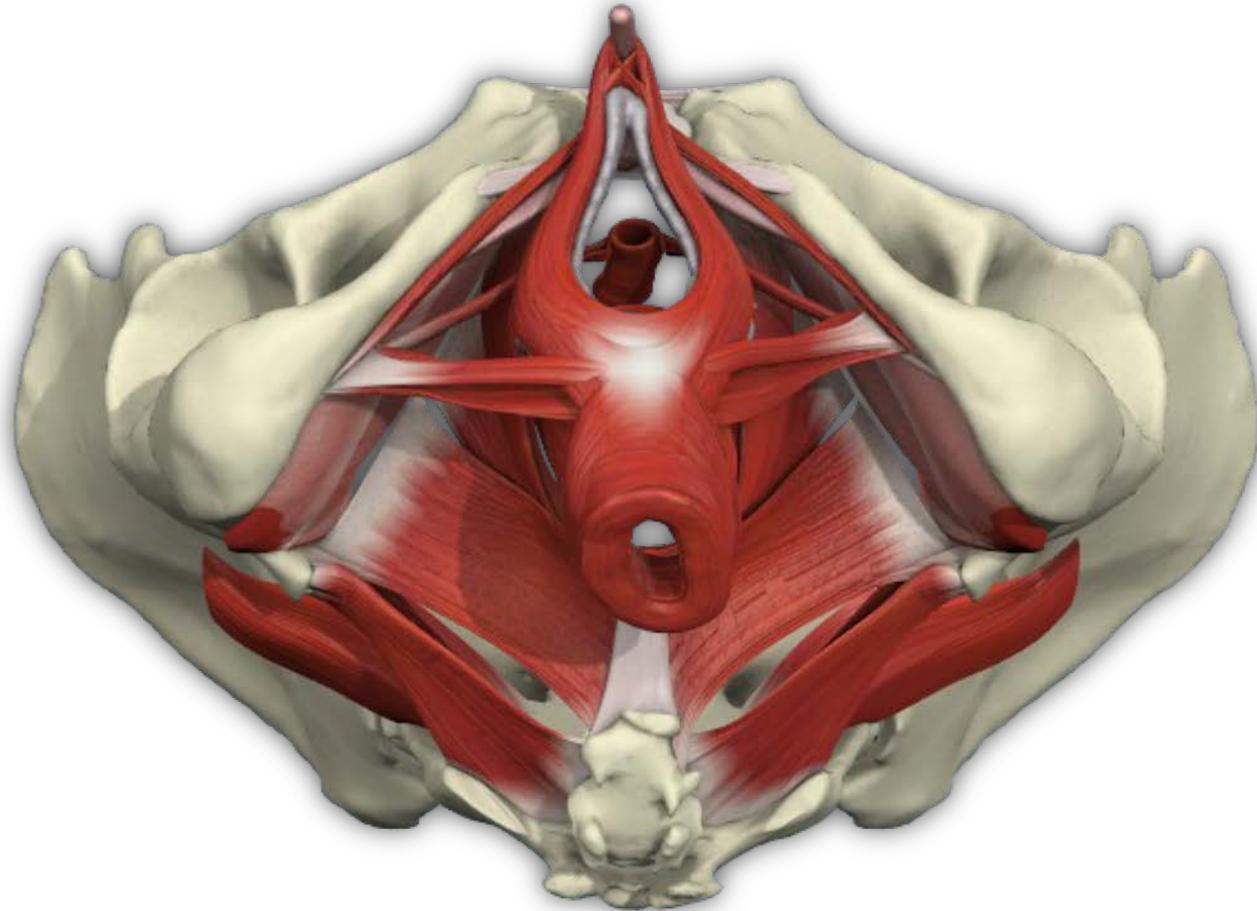


Is the disfunction anything that we can help with?

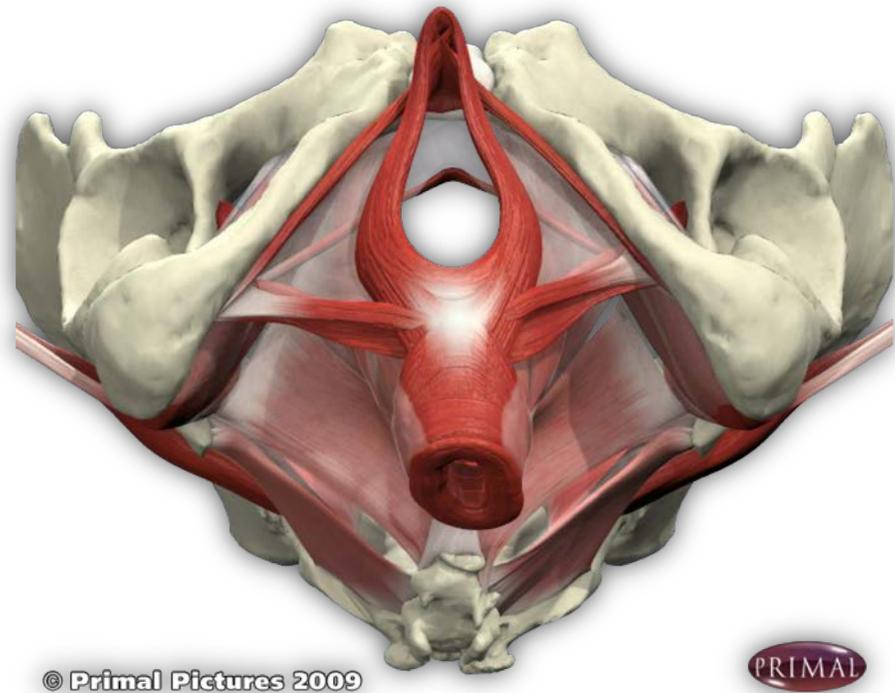


Is it high tone or low tone?

Anatomy of the Pelvic Floor *MODELS*



Superficial Perineal Layer



Innervated by the Pudendal Nerve

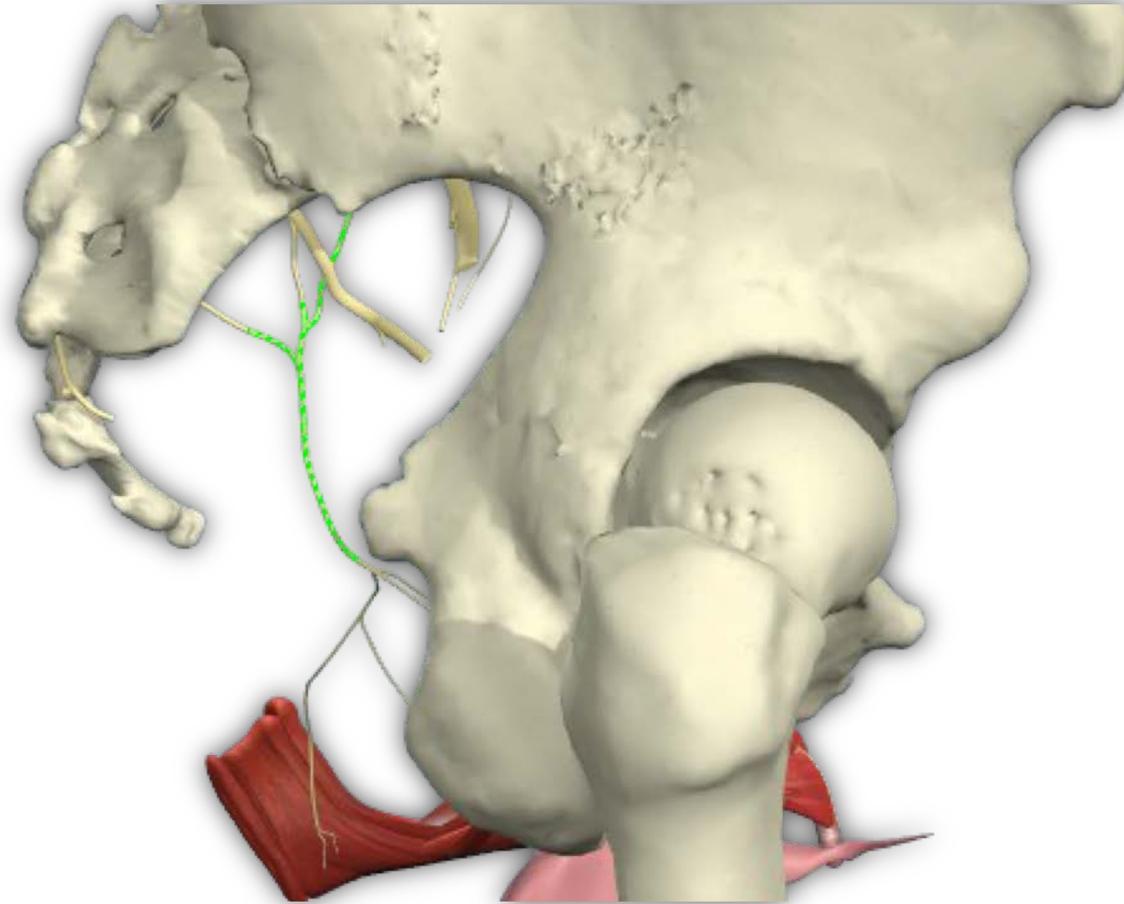
Bulbospongiosus.

Ischiocavernosus

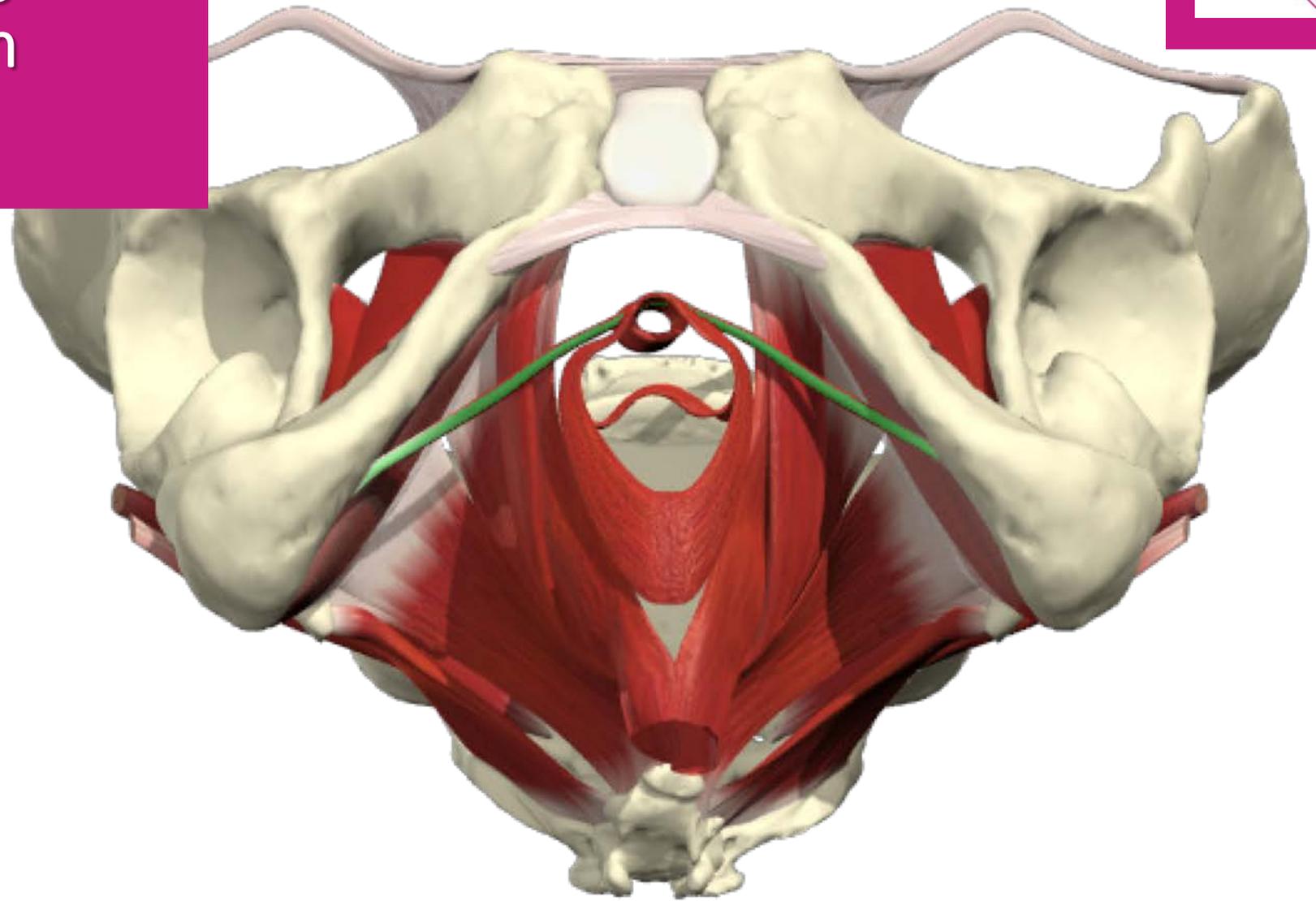
Superficial Transverse Perineal

External Anal Sphincter (EAS)

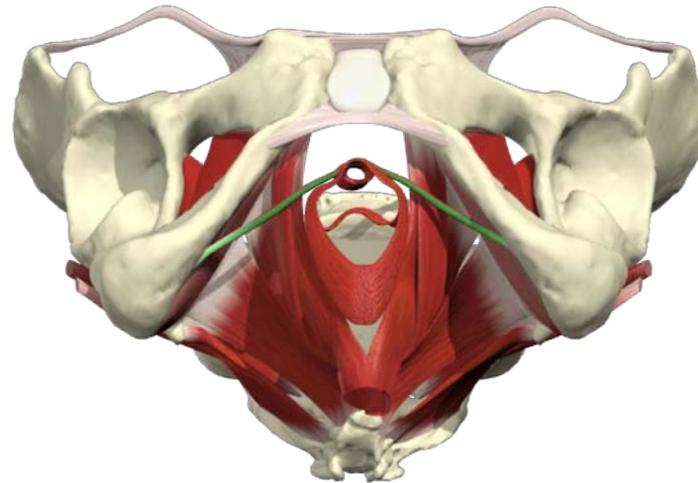
Pudendal Nerve



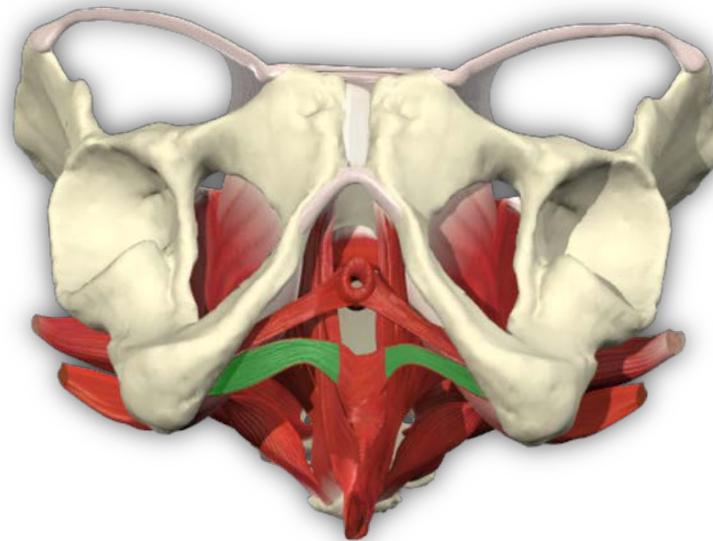
Deep Urogenital Diaphragm Layer



Compressor Urethrae



Deep Transverse Perineal



PRIMAL PICTURES 

Pelvic Diaphragm – Levator Ani



Innervated by
Sacral Nerve
Roots S3-S5

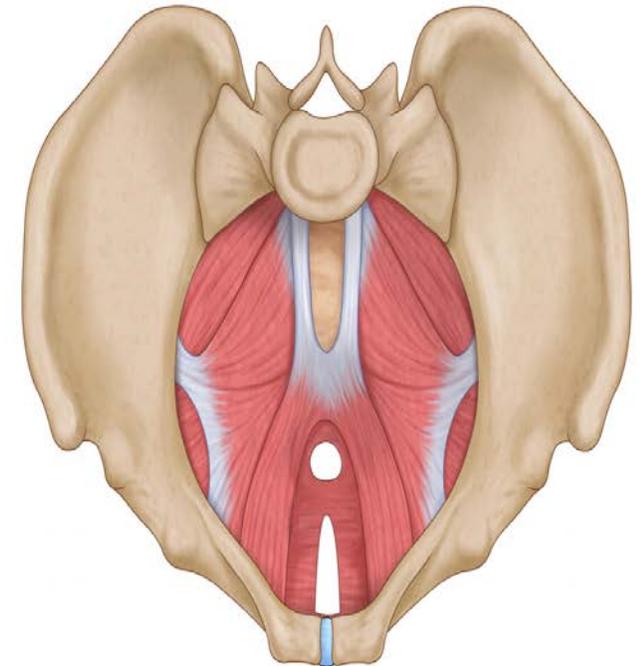
Piriformis

Obturator
Internus

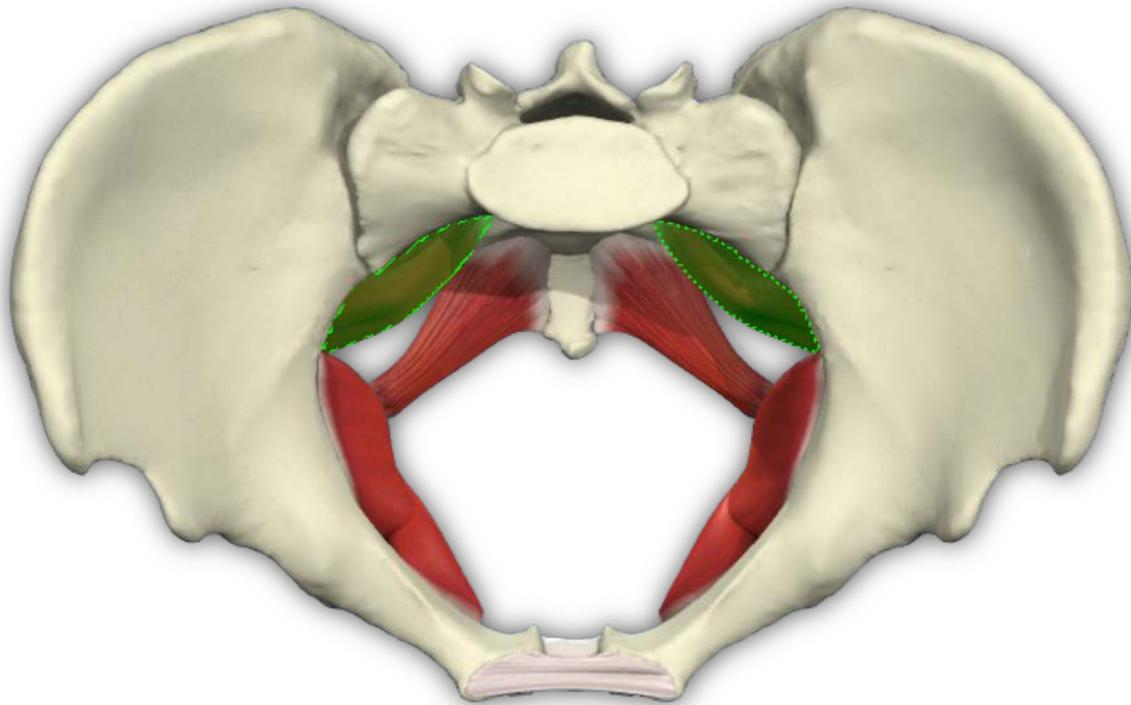
Coccygeus

Iliococcygeus

Puborectalis

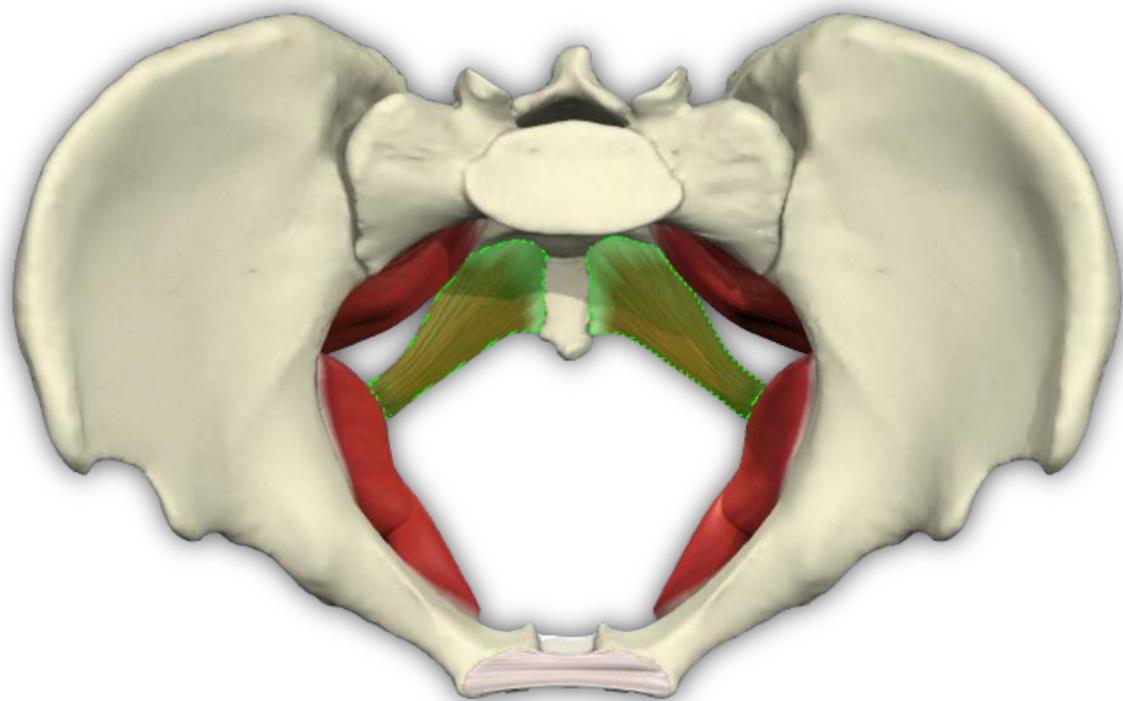


Piriformis

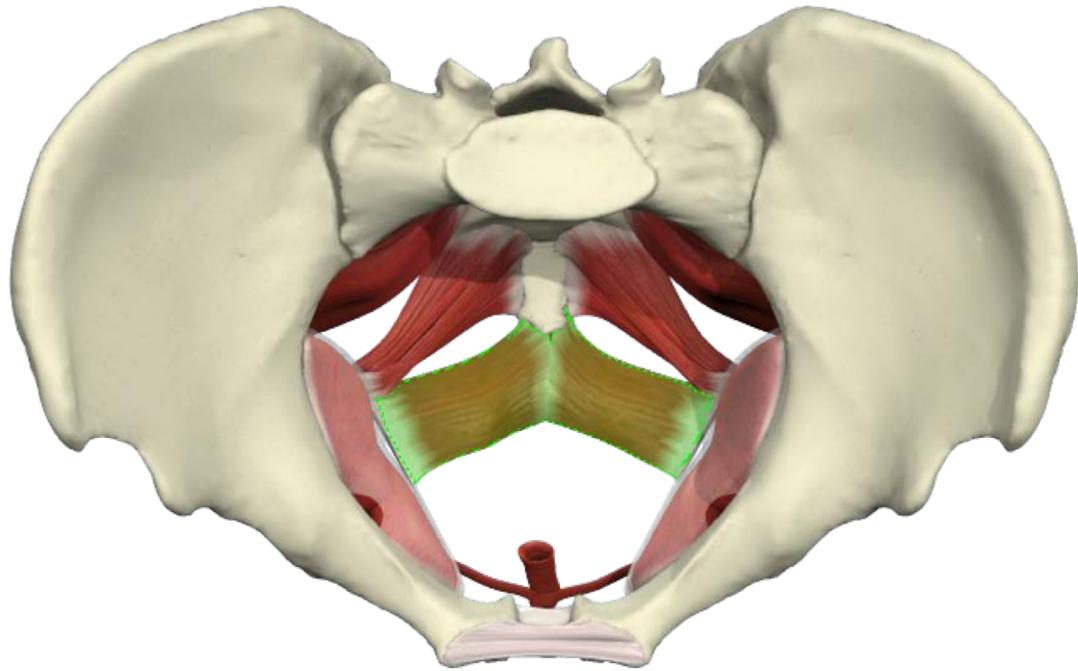


- Spasm of this muscle can cause pain that is referred to multiple regions of the pelvis and low back (Simons & Travell, 1999) and may contribute to dyspareunia and painful defecation (Brown, 2000).
- Relevant to continence and pelvic floor dysfunction in terms of pain referral and proximity to sciatic nerve Shared tendon with gemellus and OI

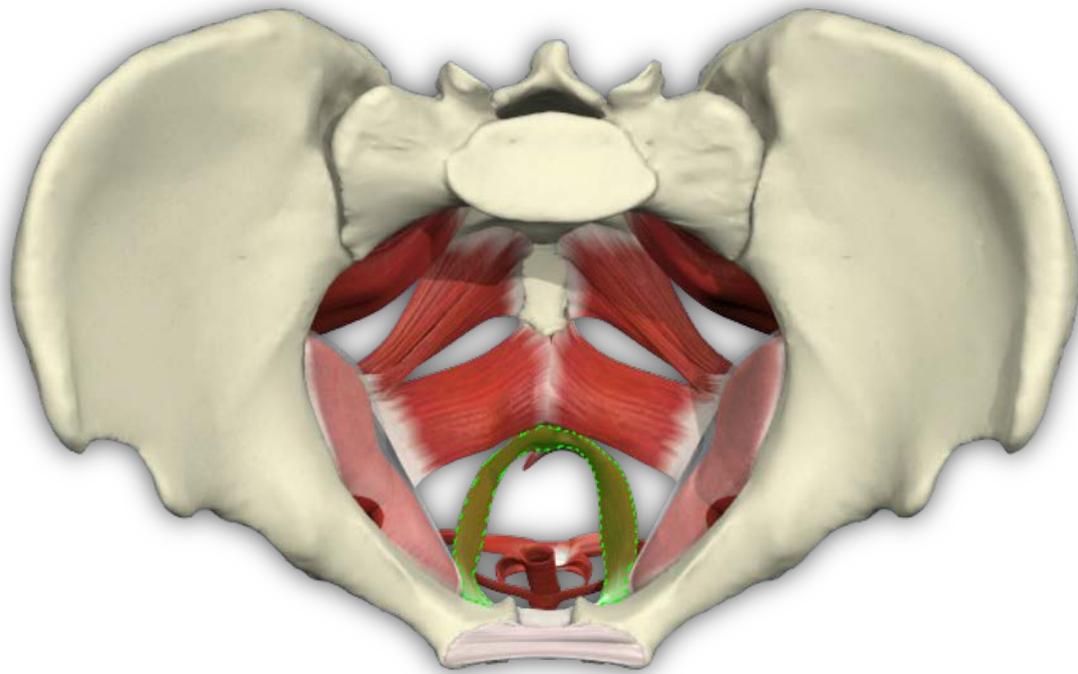
Coccygeus



Iliococcygeus



Puborectalis



This muscle is crucial in maintaining faecal incontinence .

Anorectal Angle



This U shaped muscle attaches to the pubic bone and wraps around the rectum .

In a functioning muscle it stays partially contracted – maintaining anal rectal angle. Keeping poo in the rectum and not in your pants

During defecation, this muscle relaxes so the angle can widen and a stool to pass

OI and LA Intact



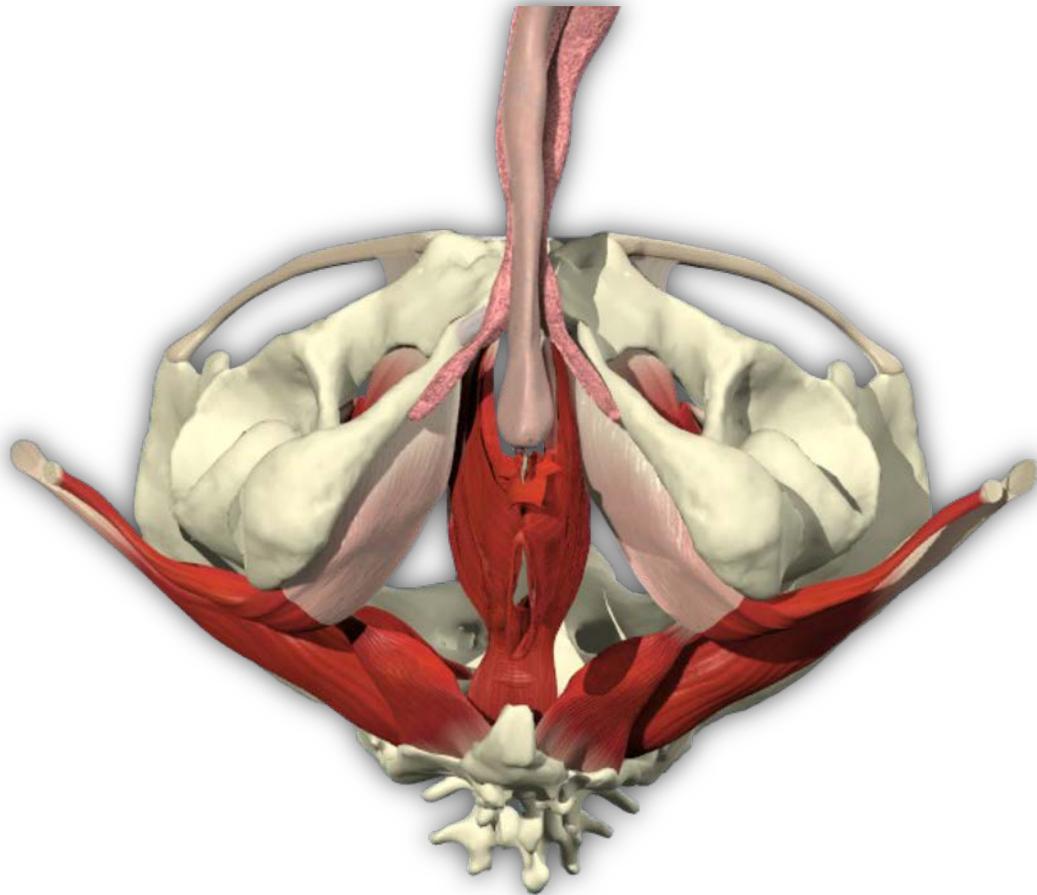
Weak LA, OI Intact



Weak OI, Weak LA



Male Pelvic Floor



- Internal Sphincter – bladder neck circular smooth muscle, distinct from that of the detrusor
- Prevents reflux of ejaculate. Any failure may cause urine leakage into prostate urethra-urgency
- External Sphincter – striated circular voluntary muscle fibres able to interrupt the urine stream
- May be damaged during transurethral resection of the prostate (TURP) –

Male Pelvic Floor : Superficial Muscles

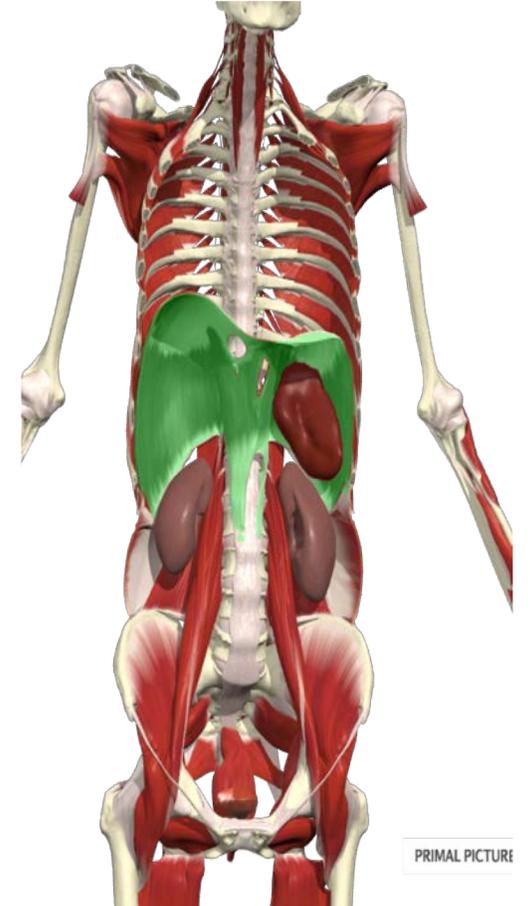
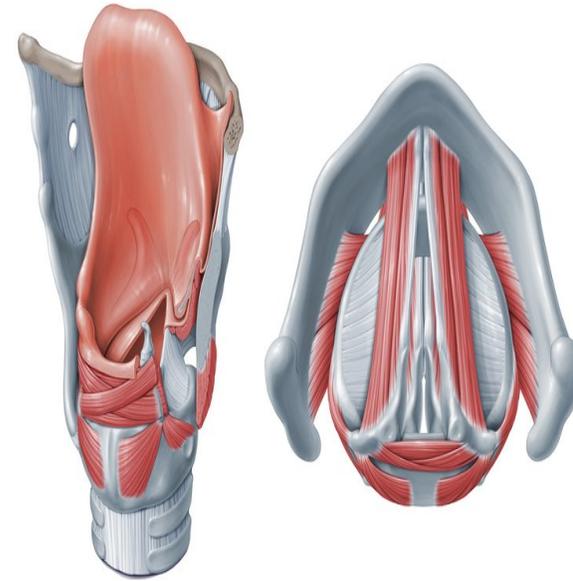
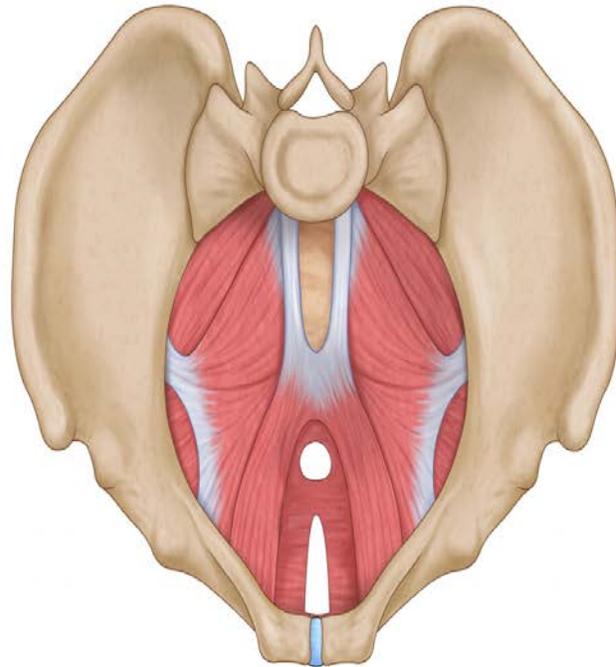


- Muscles involved with sexual activity
- Ischiocavernosus & Bulbospongiosus
 - To increase rigidity (deep dorsal vein)
 - Expels semen by rhythmic contraction
 - Compresses urethra & empties urine from the bulbar urethra
- Superficial Transverse Perineal muscle – concerned with increasing penile rigidity
- Deep transverse perineal muscle – fixes perineal body

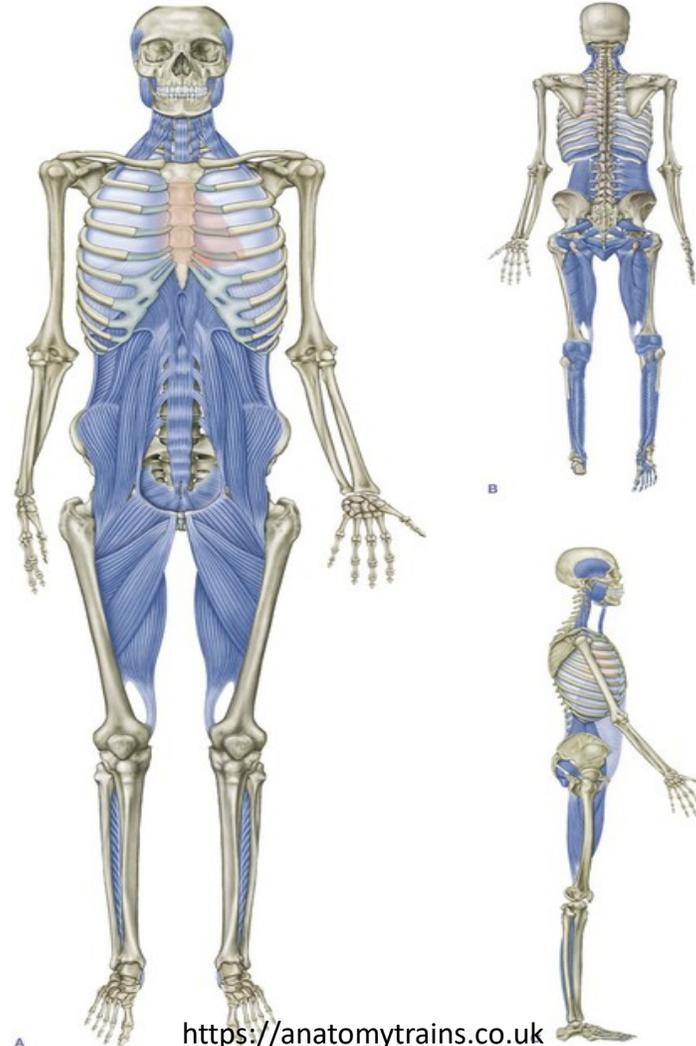
The deep front line and diaphragms of the body



Powered by FitPro



Deep Front Line



Beyond a Fit Pro



Iliococcygeus can be damaged in second stage labour d with forceps assisted birth – the rotation of the forceps can cause the iliococcygeus muscle avulsion – torn away from its attachment– crush injury and nerve damage.

If this is not picked up it often retracts and can't be repaired by surgery

It can mean weakness on one side and spasm in the other as it needs symmetry to function and maintain tension - this needs help from pelvic health physio – beyond us as fit pro's initially

Other aspect beyond us as Fit Pros

Long Second stage – suspensory ligaments of bladder and uterus

A woman can have a 'good' pelvic floor but if the ligaments have been very stretched during labour they often can't go back to previous tension and can cause prolapse and pelvic floor dysfunction (long term obesity in men and women)

Birthing techniques are changing – avoiding Valsalva manoeuvre

Seven weeks for pudendal nerve to hopefully go back to normal even after a fairly 'normal' birth. Don't panic !

- Hypermobility



High tone and Low tone pelvic floor



Lets discuss



Further training



Avoid over use of Kegels (discuss research Pilates teachers)



Start with basic Kegels – check ability - does it increases pain or symptoms stop!

Over-Active Pelvic Floor Dysfunction



Increased tone of Pelvic Floor Muscles

Painful Intercourse

Urgency, Frequency, Nocturia, Difficulty in voiding

Thiele Massage, TPR, Acupuncture

Botox

PFM Relaxation

PFM Exercise

What we do know



Posture - Diaphragms



Breathing - Diaphragms



Feet ???



Pelvic stability – deep and superficial gluteal muscles



Core function – correct recruitment – conscious and unconscious

If its tight can
we not just
stretch it ?!!!

Can we as an
individual stretch
our pelvic floor?

Can we release it?

Release techniques avoid over
doing – rebound with tightness

If its tight WHY is it tight?

Physical lack of support form the muscles that should
stabilise the pelvis – overuse of Kegels

Psychological



How to release



A whole other workshop

Breathing

Use of ball – small soft roller

Positions to release (avoid over stretching adductors if pulls don on prolapse)

What advice can we give to help with common stress and urge incontinence



Just in case

Retraining the bladder and brain

Let's discuss

The Knack

Couching - sneezing – LIFTING

Exhale on a lift

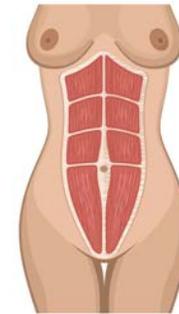
Toddler dance

Toilet rock or testicular milking

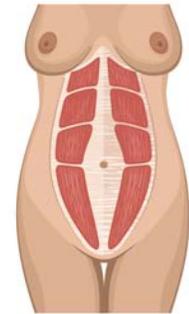
Diastasis Recti



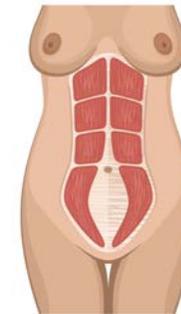
DIFFERENT VARIATIONS OF DIASTASIS RECTI



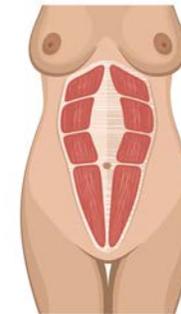
HARROW-NORMAL



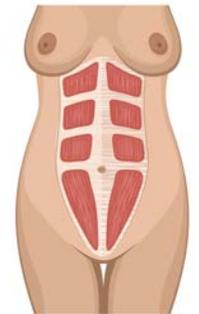
Open Diastasis



Open Below
Navel Diastasis

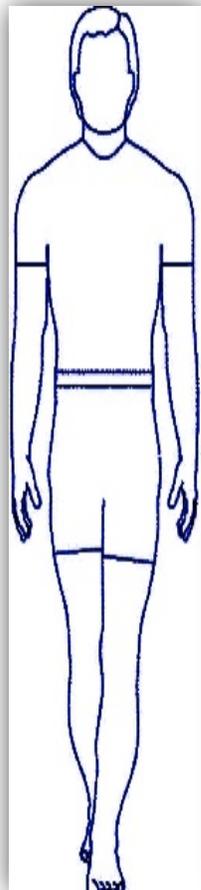


Open Above
Navel Diastasis



Completely
Open Diastasis

Pelvic stability – Functional Standing

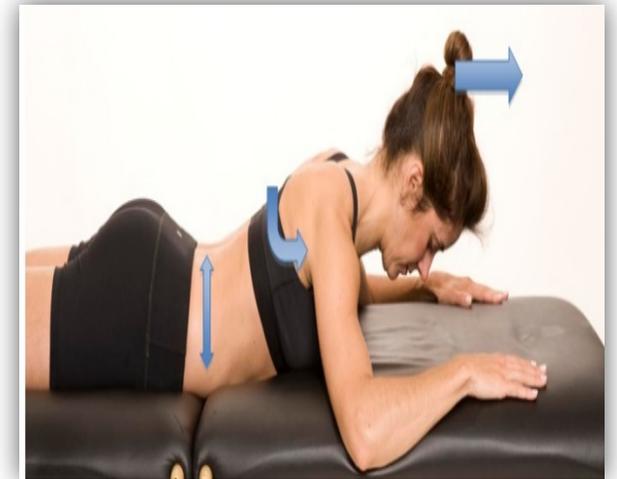
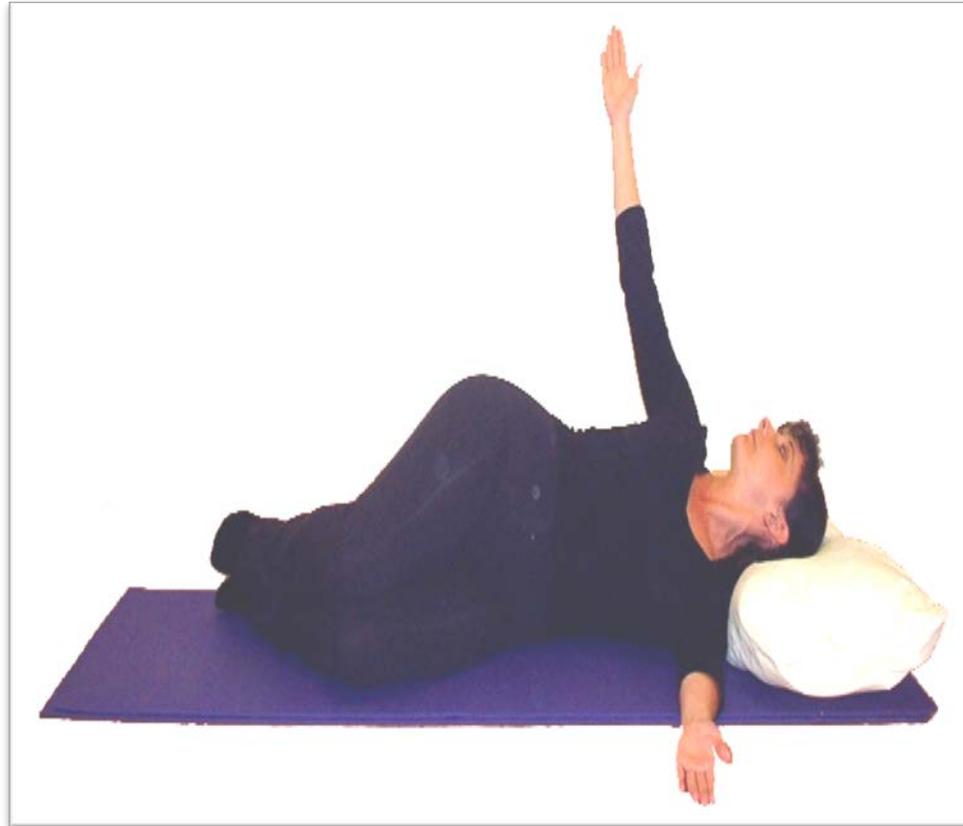


Standing knee lifts –
knee no higher than
hip
Abduct / external
rotation of the hip

Hip extension and external rotation

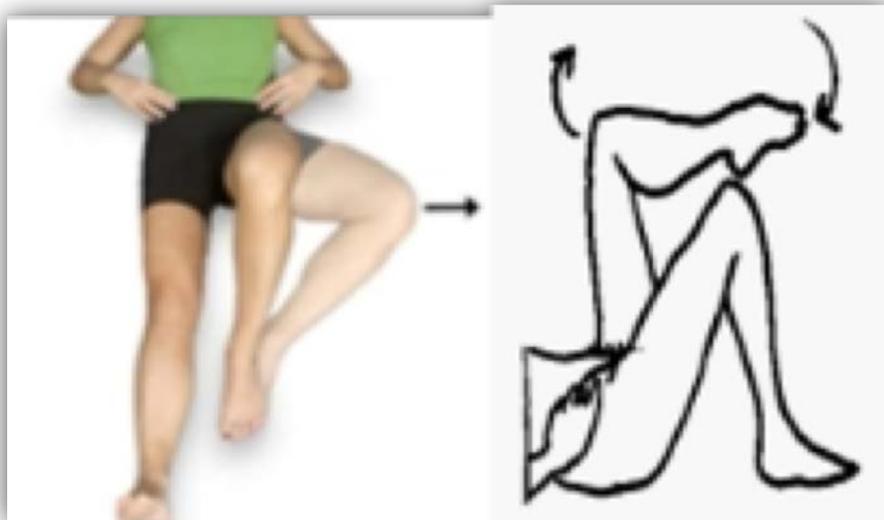


Thoracic Mobility



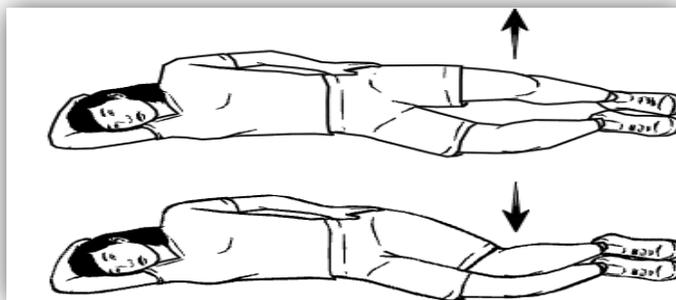
With thanks to PT On The Net

Pelvic stability



Add band to this exercise to increase then work into the obturator Internus

Diamond clam and other PF specific exercise



Discuss the set up and technique changes to the traditional clam in pic opposite to make the exercise specifically PF focused through use of OI

Practice the Diamond Clam exercise new set up and technique

Treatments



Lifestyle Modification – avoid heavy lifting, deep squats, constipation

Control increases of Intra-abdominal pressure – good technique in core activation

Pelvic Physiotherapy – trigger point release, scar therapy visceral manipulation

Hypopressives

Pelvic Floor Muscle Training early in the day – especially with prolapse

Global Stability , thoracic mobility – posture and breath work

Mechanism of Continence



- Pelvic Floor Part 1 The Pelvic Diaphragm 3D Anatomy Tutorial <https://www.youtube.com/watch?v=vnr6k43raHE>
- Pelvic Floor Part 2 Perineal Membrane and Deep Perineal Pouch 3D Anatomy Tutorial https://www.youtube.com/watch?v=K6T-O4c-u_o

High Impact Sport



Professional Guidelines



“Training in repetitive selective voluntary contraction and relaxation of specific pelvic floor muscles that is delivered and evaluated by a trained healthcare professional.”

[Adapted from urinary incontinence (NICE guideline CG171)]

Useful Resources



National Institute for Health and Clinical Excellence. Urinary incontinence: the management of urinary incontinence in women. CG40. London: National Institute for Health and Clinical Excellence; 2006. URL: <http://guidance.nice.org.uk/>

Chartered Society of Physiotherapy:
<http://pogp.csp.org.uk/publications/promoting-continence-physiotherapy>

Scientific Committee of the First International Consultation on Incontinence.
Assessment and treatment of urinary incontinence. The Lancet. Volume 355, No.
9221, p2153-2158,17 June 2000p2153

Useful Resources



- Bladder and Bowel Health website www.bladderbowel.gov.au
- Continence Foundation www.continence-foundation.org.uk/resources.html
- Pelvic Floor First
- <http://www.pelvicfloorfirst.org.au>
- Kegel 8
- <http://www.kegel8.co.uk/articles/kegels-for-men.html>
- YouTube – Anatomy Zone Tutorials on Pelvic Floor

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- These PowerPoints have been designed for use in the Pelvic Flaw presentation – they are excerpts from the Diamond Pilates course.
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