

The Pelvic Flaw



NATURE'S MISTAKE
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Aims



- What is the Pelvic Floor
- What goes wrong and why
 - So what?
 - What can we do?

Pelvic Floor Anatomy



3 Layers

- Superficial Perineal – Mainly Sexual & Anal sphincter
- Deep Urogenital –
- Pelvic Diaphragm – Piriformis, Levator Ani, Obturator Internus

Function

- Maintain continence
- Support Abdominal Viscera
- Modulate Intra-abdominal pressure
- Act as a core stabiliser
- Sexual & Reproductive Function

Obturator Internus and Levator Ani



Weak Levator Ani , Obturator Internus intact



Weak Levator Ani, Weak Obturator Internus



Pelvic Floor Dysfunction



- Urinary Incontinence
- Pelvic Organ Prolapse
 - Prostate Cancer
 - Sexual Dysfunction
 - Fecal Incontinence
 - Pelvic Pain
- Lumbar and Pelvic Instability

Impact of Urinary Incontinence

- Costs to NHS £117million per year
- 5 million people in the UK
- 20.4% of people aged 40 years and over,
- 35.6% of women at age 80 and over
- 2nd reason for elderly people being put into residential care
- Personal financial cost
- 27% were unwilling to go to places where they were unsure about the availability of toilets
- 31% dressed differently because of the problem
- 23% said it affected their sex life
- 23% avoided physical activity
- Increased risk of falling
- Social Isolation

Causes of PFM Weakness



Pregnancy and
Childbirth

Heavy Lifting

High Impact Sport

Respiratory Conditions

Constipation

Old Age

Prostate problems and
treatment

Neurological Conditions

Obesity

Inactivity

Poor Posture

Associated Pelvic Pain
Conditions

Lower Back Pain

Hypermobility

Menopause

Pregnancy & Childbirth

- 
- Weight of foetus, uterus and contents
 - Relaxin, Ligament Laxity
 - Pubic Symphysis Disorder
 - Weight gain
 - Constipation
 - Number of pregnancies
 - Length of 2nd stage
 - Forceps or Ventouse
 - Episiotomy or tear
 - Infection
 - Diastasis Recti
 - C Section

Heavy Lifting



- Poor Technique
- Valsalva Manoeuvre
- From a deep squat
- No pre-contraction of abdominals & Pelvic Floor

High Impact Sport



- Dynamic shift of abdominal viscera
- High Tone Pelvic Floor Dysfunction may be more common in exercising females
- The effects are greater with impact – running, trampolining

SPORTS NEWS

French gymnast springs a leak!

Olympic star has a tiddy problem mid-routine

This is French international gymnast Evie Le Penven, doing what international gymnasts do best — being herself above on a mat in a major competition. And to be fair, Evie's pretty good at gymnastic competitions. In 2004, the 19-year-old was the Olympic individual champion on the bars and, while we know about so much about gymnasts as we do about their surgery, we do know you don't get any better than Olympic champion.

Unfortunately, Evie will know the excitement we are glad to see about

Evie, but as "that French gymnast who sprung a leak in the middle of her routine". As you can see, Evie really got everything during her routine at the World Gymnastics Championships in Melbourne. And after all this effort, you might expect that she might have ended up feeling great again, but really she ended up, evie, into this place instead.

Evie's not a bad show by that French Olympic World Spring & Look for the Middle of the Routine, is it?



FRANCE'S GOLDEN GIRL



Coughing, Obesity & constipation



- Increase in Intra-Abdominal Pressure
 - Increased load
 - Bearing down

Inactivity & Posture



Resting tone of deep abdominals and pelvic floor increases in unsupported upright sitting

Both are more easily recruited in neutral

Position of pelvis

Neurological Conditions & Old Age



- MS, Parkinson's Disease, Stroke, MND
- Menopause – Oestrogen Depletion & Loss of Urethral Stiffness

Pelvic Pain



- Inflammatory conditions (IBS, PID, Endometriosis)
- Post-surgical/radiotherapy
- High Tone Pelvic Floor
- Psychosexual

Prostate Cancer



- Most commonly cancer diagnosed in men
- Affects 1 in 8 men
- It is estimated that by 2030, Prostate cancer will be the most commonly diagnosed cancer in the UK
- 42,000 new diagnoses each year
- PSA may be an indicator of prostate cancer but a high incidence of false positives in younger men
- Side Effects of Surgery – ED, UI

NICE, WHO, CSP Recommendations



- A course of pelvic floor muscle exercises (Kegels) supervised by a specialist physiotherapist
- A health or fitness professional with additional specialist training
- Adherence is better as part of a group

Exercise Paramaters



- Isolate – CSP Recommendations
- 75% Slow Twitch – Endurance and Strength
- 25% Fast Twitch – Speed
- Don't forget O.I.
- FITT Principles
- Make it functional

Evidence



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/>

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

Resources



Chartered Society of Physiotherapy

<http://pogp.csp.org.uk/publications/promoting-continence-physiotherapy>

Bladder and Bowel Health www.bladderbowel.gov.au

Continence Foundation

www.continence-foundation.org.uk/resources.html

Pelvic Floor First

<http://www.pelvicfloorfirst.org.au>

Thank You

