WRU

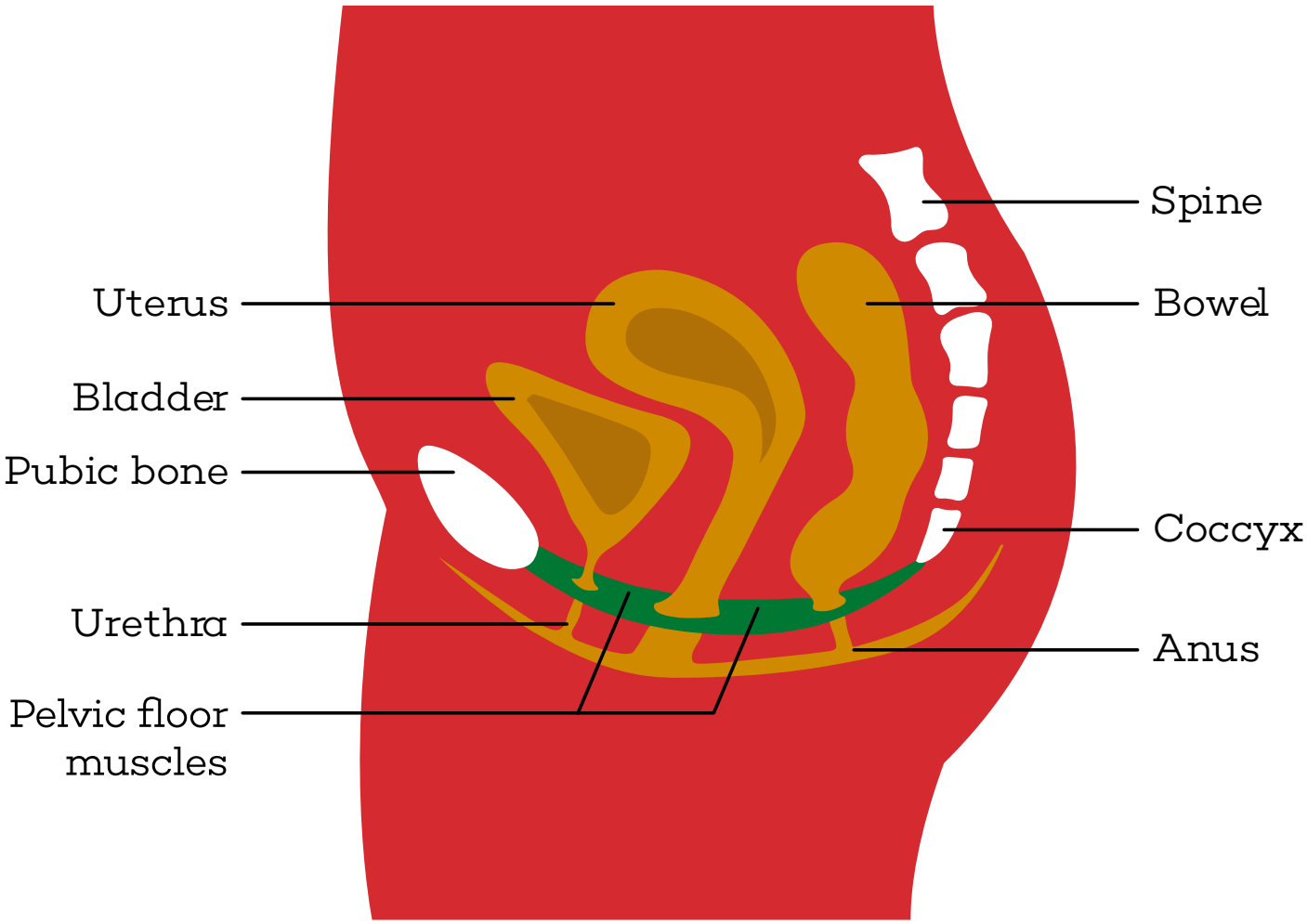
WOMEN & GIRLS HEALTH & WELFARE

PELVIC HEALTH

Our pelvic health is often something we don't discuss enough as both men and women, yet it forms an important part of our overall health for day to day living as well as sports performance. Understanding the anatomy and function of the pelvic floor is important to minimise potential symptoms throughout our lives.

WHAT IS THE PELVIC FLOOR?

The pelvic floor is a group of muscles forming a layered sling of support at the base of the pelvis. They are a mixture of slow twitch (endurance) and fast twitch muscle fibres which help us to cope with the demands of daily living as well as sudden changes in pressure within the abdomen (intra abdominal pressure) such as a cough, sneeze, jump, heavy lift, tackle or change of direction. They work with the muscles of the spine, abdomen and diaphragm to allow us to move and function effectively.



WHAT DO THEY DO?

The pelvic floor muscles have several functions including:

- Maintaining continence - stopping urinary and faecal incontinence
- Facilitating emptying of the bladder and bowel
- Supporting the pelvic organs- keeping everything in
- Enabling sexual function and pleasure

HOW DO I KNOW IF THEY ARE NOT WORKING EFFECTIVELY?

When the pelvic floor muscles are unable to carry out their role and tolerate the load applied to them, they can present with symptoms which are collectively known as pelvic floor dysfunction (PFD). Symptoms might include:

- Urinary or faecal urgency or incontinence
- Difficulty emptying the bladder or bowel
- Pelvic organ prolapse
- Pelvic pain
- Sexual dysfunction
- Pain inserting tampons or with sex
- Pressure, bulging or dragging in the vaginal area
- Constipation

RISK FACTORS FOR DEVELOPING SYMPTOMS OF PELVIC FLOOR DYSFUNCTION INCLUDE:

MODIFIABLE FACTORS (Meaning we can take measures to change them)

- **Higher body mass** - Increasing weight will add to the strain placed on the pelvic floor and may exacerbate symptoms.
- **Constipation** - Constipation stretches the pelvic floor and increases the risk of pelvic floor-related issues.
- **Diet** - Everyone is different but frequently reported triggers include caffeine, alcohol and sugar which can affect bladder and bowel urgency.
- **Impact and strenuous activity** - Athletes have a higher prevalence of PFD than the general population and it can negatively impacts a women's engagement in sport. Women in high impact sport are 4-6 times more likely to suffer incontinence than those in low impact sports.
- **Posture and stress** - It is not uncommon for us to suck our tummies in and tuck our pelvis under. Both of which increase strain on the pelvic floor and often results in the pelvic floor responding by becoming tighter. This in turn will affect our breathing ability. Stress and anxiety can add to this tension and lead to symptoms such as pain, incontinence, and constipation.

NON MODIFIABLE FACTORS (Things we can't change)

- **Increasing age** - As we get older estrogen levels decline which affects all tissues and organs within the body, including the pelvic floor. Therefore, women may experience new symptoms throughout the peri and post menopause period.
- **Pregnancy and childbirth** - Pregnancy itself increases the strain on the pelvic floor due to postural and hormonal changes as well as the extra weight from the baby. This is an important time to start pelvic floor exercises if you aren't doing them already. A vaginal birth, particularly assisted births (forceps), will also result in increased trauma to the pelvic floor muscles. Those who undergo a caesarean delivery are not exempt from pelvic floor rehabilitation and will have the additional recovery to the abdominals.

INCONTINENCE IN RUGBY PLAYERS

Leaking urine can be an embarrassing and debilitating issue for players and understandably so. Such leaking during sporting events is known as Stress Urinary Incontinence (SUI) and is defined as any involuntary loss of urine on effort or physical exertion e.g. sporting activity or on sneezing or coughing (international continence society). This may be just a small drop or enough that requires a change of clothes. It is another taboo topic for players, with many wrongly assuming symptoms are reserved for postpartum females. As with all aspects of player health it is imperative, we talk about it to better understand why you are experiencing SUI, as it can not only have health and confidence implications, but performance implications as well

"I find this has an impact on my training as sometimes I don't want to push myself too hard just incase. It's very embarrassing and does get to me. I constantly worry about leaking through my clothing whilst training or playing "

- WRU women's player.

Research has shown high incidence rates of SUI in athletes, with those involved in high impact sports being more likely to experience it than those in low impact sports. A recent rugby prevalence study has demonstrated that four in ten rugby players experienced rugby specific SUI. 63% of players had SUI and 43% rugby-related SUI. Players who experienced constipation, have given birth or have a higher body mass index were identified as having increased odds of experiencing rugby-related SUI. Forwards appeared to have increased rates compared to backs and playing at a national compared to amateur level decreased the odds of a player experiencing rugby-related SUI. The most prevalent inciting events were being tackled (75%), tackling (66%), running (63%) and jumping/landing (59%).

In Rugby Union, the pelvic floor needs to be able to tolerate change of directions, varied running speeds and increased intra-abdominal pressure from contact events such as tackling, scrummaging and falls. Therefore, both pelvic floor muscular strength, endurance and speed are needed to manage the abdominal pressures to avoid urine leakage.

TREATMENT OF STRESS URINARY INCONTINENCE

If you are experiencing symptoms of PFD we recommend speaking with your GP and seeking a referral to a women's health/pelvic health physiotherapist who can advise you on individual treatment plans.

Strategies that you can begin in the meantime include:

1. EDUCATE YOURSELF

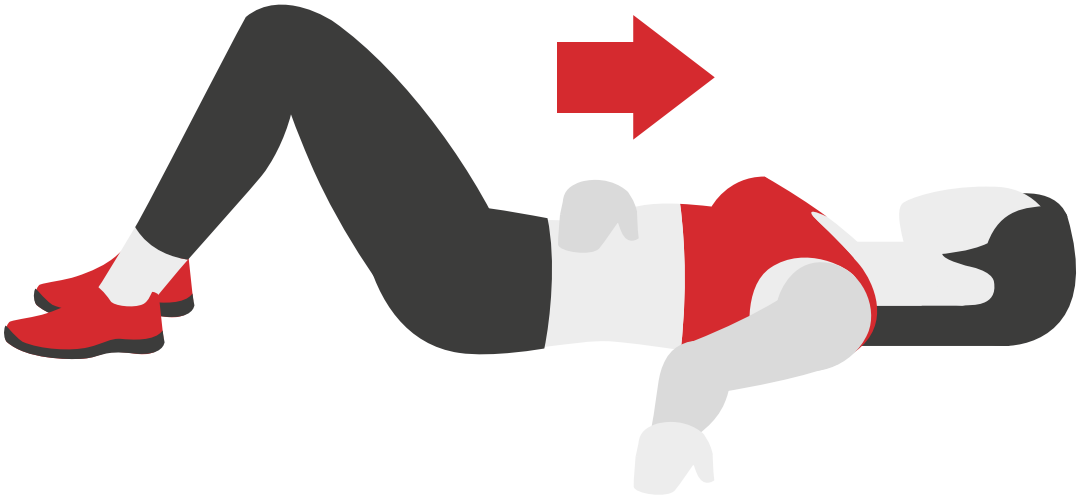
Really learn about your body, when you experience symptoms, whether it is worse at a certain time of your cycle, related to certain foods or drink or specific tasks such as jumping or tackling. This information will help form your management plan. It is also important to learn about the pelvic floor anatomy, function and rehab as evidence has shown that those with an understanding are 57% less likely to develop incontinence (Cordoso et al 2018).

2. PELVIC FLOOR MUSCLE TRAINING. (PFMT)

We strongly recommend that all women include PFMT as part of their strength programmes. The basic pelvic floor programme should initially be completed 2-3 times daily and includes 2 quick, fast contractions before 6-8 seconds holds x 8-12 repetitions. This can be reduced to 3-4 times weekly as symptoms resolve. However 1 in 4 women don't recruit their pelvic floor effectively and therefore it is important to spend conscious time encouraging a full and effective contraction (tightening) as well as relaxation. You might only be able to start with 1-2 seconds which is absolutely fine. Gradually build up, but if things don't improve then seek support from a womens health physio.

Cues that can help with the effective recruitment include:

- Imagine 'stopping gas escaping'
- Stopping the flow of urine mid flow
- Imagine tightening a zipper from the back to the front of the pelvis…
- Think about picking up a bean with your vagina and lifting it up



Exercises can be started in lying to limit the strain on the pelvic floor before progressing to sitting and standing positions. It can often feel difficult to know that you are doing the exercises correctly but other tips that can help:

- Avoid bracing or pushing out through your tummy
- Avoid gripping through your glutes or inner thigh muscles
- You shouldn't feel a downward pressure, it should feel like a lift up

You may find it easier to focus on the recruitment as you exhale (breathing out), as this is when the pelvic floor would naturally recruit and work with the abdominals.

The contraction can then be included in functional tasks, particularly those which cause symptoms. This is known as the knack technique, where you complete a quick, strong contraction prior to a jump for example, a tackle in training or a squat in the gym.

The relaxation phase is just as important and often harder for athletes. It is theorized that many athletic women have an over recruited or non-relaxing pelvic floor. Imagine holding a bag of shopping all day, your bicep would get tired, other muscles would try and compensate and things would start to hurt until you can't hold the bag anymore. This is the same for the pelvic floor muscles. If they are working all day long, they will begin to fatigue and get tight, so when you need them to work at their best during a tackle for example it can't do what you're asking, and leaking may result. The table below gives examples of how to progress strategies.

Table with summary of pelvic floor strategies adapted from the World rugby postpartum guidelines:

PROGRESSIVE FUNCTIONAL PELVIC FLOOR STRATEGIES
1. Education and identification of the pelvic floor: Begin focused pelvic floor muscle training
2. Strength and endurance progressions: Increased repetitions and length of contraction in standing. For example, 1-2 ballistic maximum voluntary contractions and 8-12 maximum voluntary contractions aiming to progress holds to 6-8 seconds
3. Functional progressions: Recruit the pelvic floor muscles during symptomatic tasks (note that this should not be something players have to think of in a game, it is a training exercise to encourage automatic activity when needed)
4. Exhaling on effort ("blow as you go") may be a useful strategy to continue to encourage reflexive pelvic floor activity
5. Ongoing directed intervention by pelvic health physiotherapist
6. Revert through strategies above if new symptoms present

3. MOBILITY AND POSTURAL REEDUCATION

Mobility exercises and stretching of the muscles that attach around the pelvic can help the pelvic floor to contract and release effectively. These might include child's pose, hip flexor, inner thigh and abdominal stretches.

Try not to brace through the abdominals throughout the day. There will be times throughout rugby where bracing is essential such as going into contact or lifting a heavier weight. This is normal but at other times try and allow the abdominals to stay soft and focus on postures where your pelvis isn't excessively arched or tucked under.

4. MINIMISE CONSTIPATION

Stay hydrated and maintain a balanced diet. Correcting any problems that cause chronic coughing is also important to minimise the strain on the pelvic floor.

5. WEARING A PAD

This can be a useful strategy whilst working on rehabilitation. This does not mean symptoms should be ignored and a pad is a solution, but it can give you confidence whilst you are getting stronger.

6. SEE A SPECIALIST

If symptoms don't improve see an expert who will give you a detailed assessment and individual treatment plan. They will decide if other adjuncts to your rehabilitation are needed such as a pessary or pelvic floor muscle trainer.

SUMMARY

- SUI is more prevalent in high impact sports with 1 in 4 rugby players experiencing it.
- Pelvic floor muscle training is important for all players and is the first line in the treatment of SUI.
- Seek help if symptoms don't improve from your GP or a women's health physiotherapist.

Note the info above is generic for women and girls and does not take into account individual presentations.

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