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THE PELVIC FLOOR FOR CAMOGIE PLAYERS

Pelvic floor dysfunction, management and preventative measures (For Players and wider match officials)

What is the pelvic floor?

The pelvic floor consists of muscles and connective tissues forming a structural sling of support to the base of the pelvis. The pelvic floor muscles serve to i) support the pelvic organs, ii) prevent leakage from the bladder or bowel, iii) facilitate emptying of the bladder and bowel, and iv) support sexual function1. It can be considered like a trampoline at the base of the pelvis that responds to and manages any load directed its way.

What is Pelvic floor dysfunction?

Pelvic floor dysfunction can present at any time throughout the female lifespan, including during adolescence2,3,4. While often associated with older and transitional periods, such as pregnancy, the menopause or aging in general, studies have highlighted that athletes who have never been pregnant or experienced childbirth can also experience pelvic floor dysfunction, particularly symptoms associated with sport5,6,7. The prevalence of urinary incontinence has also been shown to vary by sport, with impact and exertional sports (such as Camogie) predisposing up to 76% of players to symptoms8. Research even demonstrates that athletes often deny symptoms on validated surveys but when asked sport-specific questions about symptoms admit experiencing them9. This may highlight that the topic of pelvic health and associated symptoms is taboo and embarrassing or that athletes often assume that it is normal to leak10.

If you are unsure if you have signs and symptoms of pelvic floor dysfunction, consider the following questions. If you answer yes to 1 or more of these, you may benefit from speaking with a qualified health professional such as your GP or a pelvic health physiotherapist.

Do you...

 Experience urinary leakage during day-to-day life or during your sport?



- Experience urinary urgency (a strong sensation of needing to empty your bladder) usually accompanied by frequent urination and nocturia?
- Experience a bulge or something falling out that you can see or feel in your vaginal area?
- Lose stool or gas beyond normal control?
- Experience pain or discomfort in the abdomen or genital area?11

Questions taken from PDF.SENTINEL Tool, Giagio et al. 2023

How can pelvic floor symptoms impact me playing Camogie?

Symptoms of pelvic floor dysfunction can undoubtedly impact your ability to maintain or achieve your desired performance in sport. If you leak every time you sprint up and down the sideline after a sliotar or every time you engage in a hard shoulder with an opposing player, it will ultimately restrict how much you can push yourself. Or what if you have pelvic pain or symptoms such as vaginal heaviness or dragging, you may start guarding yourself which could ultimately lead to a higher risk of another injury. You may even have a fear of a tampon falling out while you play...! Any or all of these examples may cause you to avoid certain skills within the game, therefore, limiting your performance levels.

Symptoms can also impact your self-esteem and confidence. The fear of urine running down your leg during a match, or that sensation of everything falling out 'down there' can be enough to make anyone anxious. Some players even start to avoid socialising with their teammates or friends. Therefore, it is important to address any signs and symptoms and moreover, to prevent them. Communicating with coaches, teammates, friends, your club doctor or physiotherapist will allow you to find the most

appropriate pathway to help. By communicating with others and having open conversation it may give someone else struggling with symptoms the confidence to speak up too! The good news is that there is strong (Level I) evidence supporting pelvic floor muscle training as first line management for the prevention and management of symptoms of pelvic floor dysfunction2,12. It is also important to understand that your pelvic floor rehabilitation journey will be individualised and may look very different to someone else's or take a different length of time to improve.

If you continue to suffer from symptoms of pelvic floor dysfunction then it is important to speak with your support team and seek out a Pelvic Health Physiotherapist who can offer specialist assessment and management.

Even in the absence of symptoms, maintaining pelvic floor strength and conditioning is important to ensure your pelvic floor can manage the load demands being applied to it during Camogie training or games. Working with a rehabilitation professional will help you understand what the most effective way is.

Learning and practising a variety of strategies to use during training and performance can be useful tool3. For example, some Camogie players may breath-hold during demanding tasks and this may contribute to them experiencing a leak, for example, during that task. Simple adjustments such as learning not to breath hold during this task can improve symptoms. However, there is no one-size-fits-all and each person's symptoms and strategies should be evaluated and guided.



Bladder habits

You may be someone that needs to go to the toilet 'just in case' or run frequently throughout trainings and matches. Your bladder has to become trained to store larger volumes, and emptying too frequently actually trains it to not store normal volumes of urine. Trying to defer an initial urge and store more urine can stop your bladder feeling 'sensitive' when storing smaller amounts. Try holding for 2-minutes longer, 5-minutes longer etc., and build up gradually. A healthy time period is every 2-3 hours. It is important to try and avoid "just in case" bladder trips. Between needing to empty your bladder once before training or a game, try to avoid running back several times.

It is also important that you do not restrict your fluid volume prior to training or a match in order to avoid leaking. Concentrated urine is more irritable to the bladder and you need to stay hydrated while engaging in such higher levels of physical activity.

Training your pelvic floor

Symptoms of pelvic floor dysfunction, e.g. leaking from the bladder or bowel, heaviness or pain in the vaginal area may present if the pelvic floor muscles are too weak or if they lack endurance or coordination. Therefore, like any other area of the body, they require focused training. Demands placed upon the pelvic floor during Camogie are likely to be task dependent, meaning that some players may be in positions that are more demanding on the pelvic floor.

It is often difficult for players to understand how to locate or train their pelvic floor. Different cues will have different meanings and responses for different players. The following cues may help you target your pelvic floor:

"imagine you are stopping gas from escaping," "close your anus," "stop the flow of urine," or "imagine closing a zip from your back passage to your front passage."

You should not be clenching the surrounding lumbopelvic muscles or holding your breath while training your pelvic floor. If unsure how to locate your pelvic floor you may benefit from a supervised session of pelvic floor muscle training with a specialised pelvic floor physiotherapist.

Training for the pelvic floor muscles should aim to target all muscle fibres in the pelvic floor. Rapid, maximum voluntary contractions will target fast twitch fibres while slower endurance holds will target slow twitch fibres.

We currently have a lot to explore and understand about pelvic floor muscle training dosage. However, training them via 3 to 4 repetitions of rapid pelvic floor muscle exercises alongside three sets of 8 to 12 sustained close to maximum contractions repeated daily whilst symptomatic and at least three to four times per week thereafter to maintain strength and function is recommended while we await future research to best guide us14,15.

If you are looking to find out more about your pelvic floor and pelvic health, or how to train your pelvic floor muscles, then check out the following key resources:



www.thepogp.co.uk



www.squeezy.co.uk

Pregnancy and postpartum

Some players will enter motherhood while still engaging in Camogie as a sport. It is important to understand that staying active during pregnancy, where safe to do so, is beneficial to your overall pregnancy and recovery. In the context of Camogie, you will need to adapt contact elements of training while pregnant.

After having a baby, it can be hard to know how best to return to training and playing Camogie. No matter what mode of delivery you experience (vaginal or abdominal) it is important to take a period of relative rest and recovery following pregnancy and childbirth, to facilitate tissue healing. A recent international consensus statement on returning to running postpartum recommended a minimum non-contact or exertional exercise timeframe of 3 to 6 weeks13. You can, however, commence pelvic floor muscle training in the early days and weeks and gradually increase your levels of walking and functional activity. A recent international consensus statement on returning to running postpartum recomended a minimum non-contact or exertional exercise timeframe of 3-6 weeks16.

Between 4 and 6 weeks you may feel like you want to join the training group again. If you have no postpartum complications, lochia (blood loss following delivery) has progressively eased or ceased and you are feeling good, you

may try grading back into elements of training that do not involve contact drills, high impact or significant exertion.

It is important that while you increase activity and training levels, you are mindful of any unexpected symptoms such as leaking from the bladder or bowel, pain, or a heaviness or dragging in the vaginal areal4. If you experience symptoms, it is important to get assessed by an appropriate member of your sports medicine team or GP. You may be referred to a pelvic health physiotherapist for individualised pelvic floor rehabilitation.

You can gradually increase the level of impact and exertion of training as you feel ready. Remember, pelvic floor muscle training should still feature as part of your training program even when you return to training. You want your pelvic floor muscles to be ready to tolerate the load demands placed upon them.

You can find out more information on health and wellbeing during and after pregnancy via the following organisations:







https://www.activepregnancyfoundation.org/

Refer to the following infographic from Donnelly et al. 2021 for more information to guide your return to sport and check out two recent special edition review papers discussing pelvic floor function and wellbeing in rugby13 and one on returning to rugby postpartum19.

While these papers focus on rugby as a sport, there are comparable considerations for other exertional team sports including Camogie.

Reframing Return-to-Sport Postpartum: the 6 Rs Framework

Donnelly GM, Moore IS, Brockwell E, Rankin A, Cooke R. British

This framework is underpinned by a whole-systems, biopsychosocial approach that requires the safety of the mother and baby to be the overarching consideration.



Ready

Ready the athlete for anticipated whole-systems, biopsychosocial changes by proactively educating them about perinatal health considerations during the transition into pregnancy and motherhood (e.g., weight-gain, pelvic oor function, perinatal mental health). Aim to maintain exercise throughout pregnancy (where it is safe to do so for the mother and baby), limit deconditioning and optimise postpartum recovery with forward planning.

Review

Review and evaluate the postpartum athlete and address acute musculoskeletal and pelvic health rehabilitation needs. Screen for whole-systems, biopsychosocial considerations.*

Restore

Restore physical and psychological wellbeing depending on individual needs and prepare the perinatal athlete for returning to structured training environments. Include pelvic oor rehabilitation and other relevant whole-systems considerations.

Recondition

Recondition the perinatal athlete for their required physical and psychological sporting demands. Commence graded exposure towards individual-speci c training load requirements. Revisit whole-systems, biopsychosocial considerations and monitor symptoms as training increases.

Return

Return-to-sport through an individualised, evidence-informed and guided exposure to the competitive environment and re-evaluate regularly.

Refine

Re ne whole-systems, biopsychosocial strategies (e.g., optimise sleep quality, monitor for signs of relative energy de ciency syndrome) to enhance athlete training and competition availability, retaining the athlete in their sport and optimising performance.

"Whole-systems, biopsychosocial considerations - childbirth related trauma (e.g., abdominal wall dysfunction, pelvic oor dysfunction or post-traumatic stress); menstrual health; breast health (e.g., review breast support particularly in the breastfeeding athletel; neergy belance (e.g., relative energy de ciency in sport); psychological wellbeing (e.g., perinatal mental health); fear of movement; and sleep (e.g., sleep routine and quality).



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Gráinne founded Absolute Physio (www.absolute.physio) as a pelvic health focused physiotherapy clinic in 2013 and since then the business has evolved into something quite unique.

While still running private pelvic health services in her clinic in Northern Ireland, Gráinne also offers virtual pelvic health and educational services to a wider international footprint. She also offers consultancy services for businesses requiring specialist pelvic health insight and guidance.

Reference List

- Herschorn S. Female pelvic floor anatomy: the pelvic floor, supporting structures, and pelvic organs. Rev. Urol. 2004; 6 Suppl 5(Suppl 5):S2-s10.
- NICE. Pelvic Floor Dysfunction: prevention and non-surgical management. 202.
 [Accessed 2023 January 9]. Available from: https://www.nice.org.uk/guidance/ng210/chapter/Recommendations.
- 3. Arbuckle JL, Parden AM, Hoover K, et al. Prevalence and awareness of pelvic floor disorders in female adolescents seeking gynecologic care. J. Pediatr. Adolesc. Gynecol. 2019; 32:288–92. 41.
- 4. Parden AM, Griffin RL, Hoover K, et al. Prevalence, awareness, and understanding of pelvic floor disorders in adolescent and young women. Female Pelvic Med. Reconstr. Surg. 2016; 22:346–54.
- 5. Skaug KL, Engh ME, Frawley H, Bø K. Prevalence of pelvic floor dysfunction, bother, and risk factors and knowledge of the pelvic floor muscles in Norwegian male and female powerlifters and Olympic weightlifters. J. Strength Cond.Res. 2020; 36:2800–7.
- 6. SchettinoMT,Mainini G, Ercolano S, et al. Risk of pelvic floor dysfunctions in young athletes. Clin. Exp. Obstet. Gynecol. 2014; 41:671–6.
- 7. Carvalhais A,Natal Jorge R, BøK. Performing high-level sport is strongly associated with urinary incontinence in elite athletes: a comparative study of 372 elite female athletes and 372 controls. Br. J. Sports Med. 2018; 52:1586–90.
- Pires T, Pires P, Moreira H, Viana R. Prevalence of urinary incontinence in high-impact sport athletes: a systematic review and meta-analysis. J. Hum. Kinet. 2020; 73:279–88.

- Rodríguez-López ES, Acevedo-Gómez MB, Romero-Franco N, et al. Urinary incontinence among elite track and field athletes according to their event specialization: a crosssectional study. Sports Med. Open. 2022; 8:78.
- Mahoney, Kaitlini; Heidel, R. Eric2; Olewinski, Luci3. Prevalence and Normalization of Stress Urinary Incontinence in Female Strength Athletes. Journal of Strength and Conditioning Research, April 7, 2023.
- 11. Giagio, Silvia, Stefano Salvioli, Tiziano Innocenti, Giulia Gava, Marco Vecchiato, Paolo Pillastrini, and Andrea Turolla. 2023. "PFD-SENTINEL: Development of a Screening Tool for Pelvic Floor Dysfunction in Female Athletes through an International Delphi Consensus." British Journal of Sports Medicine 57(14): 899–905. https://doi.org/10.1136/bjsports-2022-105985.
- 12. Bø K. Mechanisms for pelvic floor muscle training: morphological changes and associations between changes in pelvic floor muscle variables and symptoms of female stress urinary incontinence and pelvic organ prolapse—a narrative review. Neurourol Urodyn. 2024; 1–20. doi:10.1002/nau.25551
- 13. Donnelly, G.M., Bø, K., Forner, L.B., Rankin, A. and Moore, I.S. (2024), Up for the tackle? The pelvic floor and rugby. A review. Eur J Sport Sci. https://doi.org/10.1002/ejsc.12121
- Donnelly GM, Moore IS. Sports Medicine and the Pelvic Floor. Curr Sports Med Rep. 2023
 Mar 1;22(3):82-90. doi: 10.1249/JSR.0000000000001045. PMID: 36866951.
- 15. Bø, K., Anglès-Acedo, S., Batra, A., Brækken, I. H., Chan, Y. L., Jorge, C. H., ... & Dumoulin, C. (2022). International urogynecology consultation chapter 3 committee 2; conservative treatment of patient with pelvic organ prolapse: pelvic floor muscle training. International urogynecology journal, 33(10), 2633-2667.
- 16. Christopher SM, Donnelly G, Brockwell E, et al. Clinical and exercise professional opinion of return-to-running readiness after childbirth: an international Delphi study and consensus statement. British Journal of Sports Medicine Published Online First: 26 December 2023. doi: 10.1136/bjsports-2023-107489.
- 17. Moore IS, James ML, Brockwell E, et al. Multidisciplinary, biopsychosocial factors contributing to return to running and running related stress urinary incontinence in postpartum women British Journal of Sports Medicine 2021;55:1286-1292.
- 18. Donnelly GM, Moore IS, Brockwell E, et al. Reframing return-to-sport postpartum: the 6 Rs framework British Journal of Sports Medicine 2022;56:244-245.
- Donnelly, G., Coltman, C., Dane, K., Elliott-Sale, K., Hayman, M., McCarthy-Ryan, M., Perkins, J., Rollins, S. and Moore, I. (2024), Prioritise safety, optimise success! Return to rugby postpartum. Eur J Sport Sci. https://doi.org/10.1002/ejsc.12144)



Player Welfare and Inclusion Resources

Below are some of the resources which can be found on the Camogie Association website.

You can check them out at camogie.ie



Player Welfare Booklet Vol 1 & 2



Player Welfare Booklet Vol 3 & 4



Player Health Check Programme



Injury Prevention Programme



Self Care Series



Player Welfare Podcast



Player Safety and Helmets



Concussion Guidelines



Health and Wellbeing Information



Camogie Association Disability Inclusion Policy



Supporting Organisations contact information