A 43-year old recreational gym user complaining of hip pain following giving birth 3 months previously

By Francesca Miranda & Kathryn Cox

This presentation will be on a case study following a 43-year old recreational gym user complaining of hip pain following giving birth 3 months previously.

Injury onset is how the injury occurred. The onsets for this case was;

* On-going pain since giving birth 3 months ago
* Pain and Stiffness is increased when sat or stood for too long
* When cryotherapy is used it calms the pain.

A 43-year woman who is a recreational gym user, has come into clinic complaining of “hip pain” following giving birth 3 months previously. This shows us that the mechanism of injury was the pregnancy. She explained she was had no PMH in the specific area however was a swimmer for 10 years previously with could have instigated the weakness in the joint. While talking to the client we discussed contraindications, onset, aggressive factors, of her pregnancy and many more detailed questions about lifestyle that could potentially indicate the cause of the pain. During the clinical visit we will take the patient through the hips range of movements. The anatomy behind the joint so she has a clearer understanding of the hip pain. Also, an explanation of how pregnancy aggravates the body and causes pain in specific areas. I would ask what she works on at the gym and how intensely she works. We would need to know is the pain increases after gym or if it gets worse the next day. Then that could indicate that the gym exercises are putting pressure on to the hip joint which would be aggravating the joint and making it worse.

Women of childbearing age can develop end- stage arthritis of the hip from a variety of conditions such as developmental hip dysplasia, osteonecrosis, juvenile inflammatory arthritis and trauma. (Sierra, R. J., et al, 2017)

**Differential diagnosis of the presenting case**

Pelvic Girdle Pain

Osteomyelitis of bilateral heads

Rheumatoid Arthritis

FAI - Femoroacetabular Impingement

Many pregnant women experience sacral, symphyseal, or lateral pelvic pain in activities of daily living, such as walking, sitting, or standing. It is hypothesized that peripartum pelvic pain is caused by strain of ligaments in the pelvis and lower spine resulting from a combination of damage to the ligaments, hormonal effects, muscle weakness, and the weight of the foetus. (Rost C, C., et al., 2006)

Pelvic girdle pain (PGP) is a frequent musculoskeletal disorder in mainly pregnant women. When examining the patients pain you need to consider the underlying mechanisms and the functional movements and aggravate the pain. This then can be linked to referred back from the lower back as it is commonly known to therapists that patients find it hard to distinguish between both pains due to location.

Osteomyelitis is an infection which affects bones and joints. It can go from inflammatory to bone destruction. It can be located in a section of the bone or over a few regions, which include periosteum, marrow and around the soft tissue. This can cause a trauma, joint replacement or bone surgery.

Rheumatoid Arthritis is an autoimmune disease. This can cause systemic complications, progressive or possible early death. It is characterized by synovial inflammation, cartilage, bone destruction and swelling. It can increase the chances of skeletal, cardiovascular, pulmonary and psychological disorders.

FAI is Femoroacetabular Impingement is the abnormal contact between the anterosuperior of the acetabulum and the proximal femur when requiring a big range of motion at the hip. An abrasion may occur when shear forces occurs which can cause a potential tearing of the articular acetabular cartilage.

**Red flag or Contraindications:**

* + Cancer
	+ Thyroids
	+ Hearts Problems
	+ Epilepsy
	+ Asthma
	+ Rheumatoid Arthritis
	+ Diabetes
	+ Steroids
	+ Hypermobility

The awareness of the implications on red flags and/or contraindications on the treatment allow the therapist to understand and acknowledge the patient’s needs or medical conditions. Once filling out a clinical form and finding out these details, they can continue with the treatment. This will confirm if they can carry out the treatment or choose what type is most suitable. They can inform the patient in what they are wanting to do and what they are trying to gain from this treatment.

Contraindications are specific medical conditions that effect patients in their day to day lives. They also prevent some treatments such as deep tissue massage.

This would make us aware of all the external factors of the pain, pregnancy and the women herself. We believe a couple of potential reasons that have caused pain to the patient. Firstly, females have a wider hip angle compared to males, it is called a “Q” angle and is to aid in pregnancy, which our patient has been through 3 months previously. We do not know yet if this is her first birth, or if there were any complications during the pregnancy. Secondly, the woman is in her early 40s, this could potentially be linked into the pain, due to the body being older and having a slower recovery after the pregnancy and again more complications could be presented. During pregnancy, women release a hormone called “Relaxin” this hormone helps the ligaments and muscle to become more laxity to prepare for the child and childbirth. The patient has told us she is a “recreational gym user”, however we do not know why type of exercise she did, being cardio or strength. We would need to know her medical history or any diseases she may have Late 40/50s is commonly known for when menopause will happen, which effects the whole body.

As you can see from the clinical assessment, we observed and palpated the hip area. We clear the joints above and below to make sure the pain wasn’t being referred from the lumbar spine or the knee. They were both clear so from this we know the pain is in the hip. From the form you can see active, passive and resisted range of movements are performed with overpressure. Flexion, Extension, Internal Rotation, abduction and adduction. In the form you can see under previous medical history that she has had no previous pains or breaks to that region. Or anywhere else in the body.

We found positive findings which included:

* There was no visible bruising
* The posture was not out of line
* The hip position was symmetrical
* No deformities
* The gait was even and clear

We also found negative findings which included:

* The ROM from L to R leg are different
* On palpation in the area was tender and hot
* The joint was visually swollen

The special tests completed were:

FADDIR test – which is a FAI TEST

Trendelenburg test – Which is weakness of the glute medius

Sacroiliac joint tests; Compression test of the iliac joint, Distraction test, thigh thrust test and sacral thrust test which applies force onto sacrum

Slump Test – Sciatic Nerve

Thomas Test – Rectus femoris tightness and hip flexor muscles

We completed some functional test with her, and she could complete them all.

Squat and Lunge - pain occurred

Stairclimbing – pain but not as bad as squat

To conclude and evaluate this case of hip pain after giving birth 3 months previously and the patient also being a recreational gym user. We have come to believe that the diagnosis is Femoroacetabular Impingement.

After the clinical assessment we would manage this case with specific home exercises due to her having to look after a new-born baby. She has made us aware she is on maternity leave for another 9 months. This means she can feel less strain on her day to day life and having to worry to fit these in. These exercises will mimic day to day movements and some of the favourite exercises in the gym. This is will make her feel like she is not missing out from the gym or losing any confidence with her leisurely gym sessions. Starting off gradually we will set the progression short term and long-term goals and continue to have follow up and check ins. The exercises and movements throughout will increase ROM and intensity. Weekly contact will be kept with patient to ensure prevent further pain from these exercises and goals.

A few exercises and stretches we would recommend would be;

* Glute bridges
* Walking lunges (Working depth)
* Half squats (Working depth)
* Walking half squats (Working depth)
* Stepping high knees
* Superman movement
* Stairclimbing – Stepping onto box depths

Patients were advised how to sit, stand, or lie down, avoiding adduction of the legs combined with internal rotation. Most patients required only two or three sessions to regain daily function and get control over their pain. (Rost, C, C., et al., 2006)

An individualized treatment approach with specific stabilizing exercises appears to be more effective than physical therapy without specific stabilizing exercises for women with pelvic girdle pain after pregnancy. (Stuge, B., et al., 2004)