HIP SOFT TISSUE COMMOM INJURIES AND DYSFUNCTION

Injury /condition	Description	Picture
Trendelenburg gait (hip abductor weakness / gluteal tendinopathy)	The abnormal gate (also called painless osteogenic gait) which affected by weakness in hip abductor muscles, including the gluteus medius and gluteus minimus,. When they are too weak to support the weight of the body, it causes drooping of the pelvis to the contralateral side while walking. It also called. It gives noticeable side-to-side motion which may look as limping or missing a step. Causes of weakness in hip abductors: • Repetitive straining of hip abductor muscles during physical activity leading inflammation • Surgery such as a total hip replacement surgery • nerve damage or dysfunction in gluteal minimus and medius muscles • Serious disorders such as osteoarthritis, poliomyelitis, cleidocranial dysostosis (improper development of bones from berth), muscular dystrophy. Symptoms: • Abnormal gate: • Drooping of the pelvis to the contralateral side while walking • Leaning back or to the side slightly maintain balance during walking • Lifting the feet higher off the ground with each step to mainrain balance as the pelvis shifts unevenly • Weak hip flexors may lead to lower back or hip pain may cause difficulty doing certain activities, such as walking or climbing stairs Treatment and recovery: Physiotherapy: strengthening hip abductor muscles programme	Normal gait Trendelenburg gait

Piriformis syndrome

Neuromuscular disorder that is caused when the piriformis muscle compresses the sciatic nerve. It is often mistaken for sciatica, which results from spinal dysfunction such as a herniated disc or spinal stenosis.

Causes:

Primary piriformis syndrome-split piriformis muscle, split sciatic nerve, and/or an atypical sciatic nerve path. **Secondary** piriformis syndrome-inflammation of soft tissues, muscle spasm or both, resulting in piriformis compressing on the sciatic nerve.

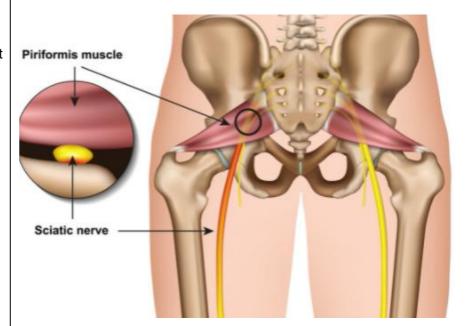
- Gradual tightening of the piriformis muscle due to poor muscle fitness:overuse from excessive exercise such as prolong running
- Life style :sitting or standing for extended periods, lifting heavy objects, extensive stair climbing, etc
- Injuries: such as sudden twist of the hip, fall, direct trauma (during sports or vehicle accident), penetration wound, etc

Symptoms:

- Pain in the opposite sacroiliac joint
- Pain with sitting standing or walking for more than 20 minutes
- Intense pain with sitting or squatting
- Pain and/or paresthesia (pins and needles, numbness, burning, tingling, or itching sensations) radiating from the sacrum down the back of the thigh, usually stopping above the knee
- Pain that improves with movement
- Pain when standing up from seated or squatting
- Foot numbness
- In serious cases severe/disabling pain in buttocks and legs –interrupting everyday tasks(such as sitting at the desk, driving,etc)
- tenderness of the piriformis muscles

Treatment and recovery:

Rest and avoiding activities that trigger your symptoms



	Alternate ice and heat therapy to the buttocks or legs Physical therapy, massage therapy Prevention: Active life style regular exercise warming up and stretching before vigorous exercises	
Trochanteric bursitis	Inflammation of the Trochanteric bursa, at the greater trochanter of femur affecting the outer edge of the hip, causing pain. Causes: Direct injuries to the hip or tendon (fall, car accident, etc) Overuse from repetitive activities such as running, bicycling, climbing stairs, etc Being immobile for prolong time: lying on one side or standing for long periods of time Surgery to the hip or prosthetic implants in the hips Other health conditions: spine problems such as scoliosis or arthritis of the lumbar spine arthritis, rheumatoid arthritis, gout; thyroid disease; bone spurs in the hip or femur Different lengths of legs Risk factors: it's most common in middle-aged or elderly people; women get it more often than men. Symptoms: Pain in the outer part of the hip, which can get worse with activities such as walking or climbing stairs Soreness with pressure on the outside of the hip: pressing or lying on that side. Pain can spread, or radiate, down the thigh. Pain may be sharp at first, it can fade gradually into an ache. Swelling might be in the affected leg Treatment and recovery: Rest: avoiding the activity that caused trochanteric	Tensor fasciae latae muscle Greater trochanteric bursa Iliotibial band Femur

bursitis

- Using chryo or heat therapy
- Anti-inflammatory and pain relieve drugs
- Physical therapy: strengthening and stretching programme
- Massage, ultrasound
- Assistive devices- a cane or crutches

- Myositis ossificans(MO)

It is a condition where bone or bone-like tissue forms inside skeletal muscle or other soft tissue after an injury. In a area of a direct trauma, a large contusion (bruise) and a pool of blood form a hematoma. That's where a bone may start grow and lead to MO.

Larger muscles as of the upper arm and thigh are most commonly affected. MO can also affect fat or connective tissue as fascia, tendons and ligaments. Adolescents and young adults are most likely to develop MO; also people who have paraplegia.

Causes:

- Direct trauma to the skeletal muscle and soft tissue during sport activities(playing rugby or cycling landing hard on the ground in a bike accident, etc)
- Repeated minor trauma eg. during horse riding on the inside thighs of the rider
- Fractures
- Surgery, such as a hip replacement.
- Other diseases:
 - Fibrodysplasia (myositis) ossificans progressiva -a rare, hereditary disease that's seen in children under 10 years old
 - Extraskeletal osteosarcoma a rare cancerous tumor, normally affect people over 40years old.

Symptoms:

Within one/ two weeks after the initial injury in the affected area:

- Pain increases
- Range of motion decreases



 Swelling and feeling warm or hot to the touch A lump can be palpated in the muscle Severe pain or tenderness but limited to the injured muscle ROM in that limb will be limited Treatment and recovery: First 2 weeks :RICE Avoiding heavy activities, massage, forceful stretching. After 2 weeks: no pain,gentle stretching and strengthening exercises when recommended by the doctor or physiotherapist 	