

# JOINT DYSFUNCTION - HIP & KNEE

**Causes:** Joint dysfunction, commonly presenting as joint pain or discomfort, can occur in joints of the hip, knee, ankle and foot. The pain can refer from the cartilaginous tissues linking the bones or associated structures.

**Symptoms:** Symptoms include pain and discomfort locally and referred. Slight swelling, stiffness and redness can also occur. People may also report restricted motion.

**Examples:** Hip joint dysfunction, knee joint dysfunction.

### How our experts can help:

Depending on the findings of the history and patient examination, the chiropractor will recommend an individualized plan of management. The treatment options may include:

- Patient education and reassurance
- Manipulation
- Soft tissue therapy of associated structures
- Modalities including electrical stimulation, acupuncture, ultrasound etc.
- Rehabilitation and exercises
- Ergonomic and lifestyle changes
- Referral and co-management (e.g. trauma or dislocation)

## NERVE ENTRAPMENT - HIP & KNEE

Neurological conditions can present in many forms either a pinched nerve or stemming from the central nervous system or metabolic/endocrine disease.

Chiropractors are extensively trained in the assessment and diagnosis of such conditions, and are able to refer to an appropriate healthcare provider when needed or for additional imaging.

Causes: Nerve entrapment (or "pinched nerve") can occur when pressure is applied to a nerve by a structure or tissue including bone, cartilage, muscles or tendons. Yet, entrapment can also be secondary to other factors such as pregnancy due to the increase in water retention and swelling.

**Symptoms:** Signs and symptoms can include:

- Sharp, shooting, aching or burning pain
- Numbness or decreased sensation
- Tingling or "pins and needles" sensations
- Muscle weakness





Examples: Sciatic-type pain, peroneal nerve entrapment.

#### How our experts can help:

Depending on the findings of the history and patient examination, the chiropractor will recommend an individualized plan of management. The treatment options may include:

- Patient education and reassurance
- Soft tissue therapy
- Modalities including electrical stimulation, acupuncture, ultrasound etc.
- Rehabilitation and exercises
- Ergonomic and lifestyle changes
- Referral and co-management if needed

### STRAIN – HIP & KNEE

Strain is an injury to a muscle or tendon that may present in small or larger tears or stretching of the fibres.

**Causes:** A muscle strain can be caused by a trauma or accident, muscle overuse or due to dysfunctional movement. Strains can be either acute or chronic, and typically happen as a result of the muscle or tendon being stretched or torn. Strains are not restricted to athletes as anyone can be susceptible to a strain.

**Symptoms:** Signs and symptoms can vary depending on the mechanism of injury, or if it is an acute strain versus a chronic strain. However, common symptoms include pain, swelling, stiffness, bruising, muscle spasms and limited range of motion.

Examples: Piriformis syndrome, shin splints, hamstring strain, groin/adductor strain

### How our experts can help:

Depending on the findings of the history and patient examination, the chiropractor may recommend patient reassurance, manual therapies, modalities and lifestyle recommendations including rehabilitation. However, the plan of management will be individualized to the patient's needs and examination findings. The treatment options may include:

- Patient education and reassurance
- Mobilization or manipulation of related joints if dysfunction is present
- Soft tissue therapy
- Modalities including electrical stimulation, acupuncture, ultrasound etc.
- Rehabilitation and exercises
- Ergonomic and lifestyle changes





## SPRAIN - HIP & KNEE

Sprain is an injury to a ligament that may present in small or larger tears or stretching of the fibres.

**Causes:** A ligament sprain can be caused by a trauma or accident, overextension of the ligament or severely stressing the joint. Strains can be either acute or chronic.

**Symptoms:** Signs and symptoms can vary depending on the mechanism of injury, or if it is an acute sprain versus a chronic strain. However, common symptoms include pain, swelling, bruising, muscle spasms and limited range of motion. Some people may also hear or feel a "pop" around the joint.

**Examples:** Meniscus sprain, medial collateral ligament (MCL) sprain, lateral collateral ligament (LCL) sprain, anterior cruciate ligament (ACL) sprain, posterior cruciate ligament (PCL) sprain.

#### How our experts can help:

Depending on the findings of the history and patient examination, the chiropractor may recommend patient reassurance, manual therapies, modalities and lifestyle recommendations including rehabilitation. However, the plan of management will be individualized to the patient's needs and examination findings. The treatment options may include:

- Patient education and reassurance
- Manipulation or mobilization of related joints if dysfunction is present
- Soft tissue therapy
- Modalities including electrical stimulation, acupuncture, ultrasound etc.
- Rehabilitation and exercises
- Ergonomic and lifestyle changes

# JOINT DEGENERATION - HIP & KNEE

Causes: Typically, joint degeneration can occur in most people as they age. At times, degeneration can be referred to as "wear and tear". Degeneration of the joint surface, for example, can be accompanied by an overgrowth of bone, narrowing of the joint space and deformity of the joint. Osteoarthritis is a form of joint degeneration and may present in numerous joints of the body including the hips and knees.

There are various factors that have been associated with joint degeneration, such as osteoarthritis, including heredity, injury, fractures and overuse. However, certain





conditions can also play a role including metabolic disorders and gout. Furthermore, obesity or being overweight has been associated with a greater risk to develop osteoarthritis of the knee.

**Symptoms:** The presentation of signs and symptoms can vary greatly depending on the affected joint and area of the body. Generally, symptoms may include:

- Pain and discomfort
- Swelling and tenderness to touch
- Joint may be warm to touch
- Shooting pain, numbness, or weakness as bony structures press on nerves
- Prolonged joint stiffness which may follow activity
- Pain worsened by activity or when weight-bearing
- Limitation of motion
- When progressed, crepitus (e.g. creaking or cracking)

Examples: Osteoarthritis, gout, reactive arthritis.

### How our experts can help:

Depending on the findings of the history and patient examination, the chiropractor will recommend an individualized plan of management. The treatment options may include:

- Patient education and reassurance
- Mobilization of the joint, or associated joints
- Soft tissue therapy
- Modalities including electrical stimulation, acupuncture, ultrasound etc.
- Rehabilitation and exercises
- Ergonomic and lifestyle changes
- Referral and co-management (e.g. trauma or dislocation)

