



# COMMON AGEING KNEE CONDITIONS

Experiencing pain or discomfort in your knees is such a common condition, particularly as we get older. The severity of your pain can limit your activity, impact the function of your knees and in many cases affect your enjoyment of even the simplest of everyday activities. There are many reasons why we may begin to experience knee pain – here are some of the most common:

#### **OSTEOARTHRITIS**

Osteoarthritis occurs when the cartilage on the joint surfaces wears out and exposes the underlying bone. This is what is termed a degenerative joint disease. For more information, refer to page 3.

#### MENISCUS TEAR

The meniscus in your knee works as a shock absorber, as well as providing stability for the joint among other things. In younger patients, tears often occur as a sporting injury, yet in older patients, tears generally occur due to degeneration and aging. For more information, refer to page 4.

#### LIGAMENT INJURIES

As we age and our tendons and ligaments change, our joint motion and flexibility decreases. Ligament injuries can commonly occur, as the ligaments become strained beyond their normal range. For more information, refer to page 5.



# WHEN SHOULD YOU CONSULT A SPECIALIST FOR YOUR KNEE PAIN?

An Orthopaedic Surgeon is a medical doctor with extensive training in the assessment, diagnosis and management of injuries and diseases of the musculoskeletal system which includes your bones, joints and muscles. Orthopaedic surgeons may undertake further training to sub-specialise and develop expertise in both surgical and non-surgical care and treatment of knee pain.

Surgery is usually the last option doctors consider. Doctors prefer non-invasive treatment options, such as physical therapy, splinting, rehabilitation and other solutions. However, if these treatments do not provide significant results or relieve pain, a knee specialist can help you choose the best surgical options for getting you back on your feet!

# HERE ARE SOME WARNING SIGNS THAT YOUR KNEE CONDITION OR INJURY REQUIRES HELP FROM A SPECIALIST:

- Hard to walk due to knee pain
- Limping
- Difficulty walking up or down steps due to stiffness and weakness
- Unable to fully extend or bend the knee
- · Knee 'getting stuck' or locking up
- Swelling
- Knee pain at night waking you up

# **OSTEOARTHRITIS**

Osteoarthritis is a degenerative type of arthritis that commonly occurs in people over 50 years old. Here's what you need to know.

#### TYPICAL SYMPTOMS

- Pain
- Swelling
- Instability
- Stiffness

#### **COMMON CAUSES**

Surprisingly, only a small percentage of osteoarthritis cases have a definable cause, like rheumatoid arthritis or trauma. In fact, in the large majority of cases, the cause cannot be clearly pinpointed – such cases are defined as 'primary osteoarthritis'.

#### **OSTEOARTHRITIS TREATMENT**

#### NON-OPERATIVE TREATMENTS

When treating osteoarthritis, often the non-operative options will be examined first. These may include:

#### **MEDICATION**

To help reduce pain and improve activity, pain medication may be prescribed. It is best to see your doctor on the best pain medication advice.

#### **EXERCISE**

While it may seem challenging, muscle-strengthening exercises can really benefit. Of course, low impact exercises, like swimming yoga, pilates and cycling are often best.

#### **WALKING AIDES AND BRACES**

Knee braces may help to reduce pain and assist in mobility by distributing your weight off the more damaged areas of your knee. Alternatively, walking aides and canes can also help to reduce the load on your knees, hence reducing the pain.

#### **WEIGHT LOSS**

In a similar vein to walking aides, there are studies that have shown than even small amounts of weight loss (5-10%) can have a positive impact on the pain of the joint, as well as improving mobility.

#### SURGICAL TREATMENT

Surgery is typically a last resort for knee osteoarthritis (OA). Surgery is also recommended when non-surgical treatments for knee OA is not enough to cope with the pain, swelling, stiffness and other symptoms of knee OA.

Here are the different types of surgery used to treat knee osteoarthritis:

#### **REALIGNING BONES**

If osteoarthritis has damaged one side of your knee more than the other, an osteotomy might be helpful. In a knee osteotomy, a surgeon cuts across the bone either above or below the knee to realign the joint. This shifts pressure from arthritic parts of the joint to non-arthritic parts.

#### JOINT REPLACEMENT

With this type of surgery, your surgeon replaces all of the damaged cartilage in the knee joint (called total knee arthroplasty) or just a part of the joint (called partial knee arthroplasty) using artificial parts. These artificial parts are called prostheses, and they can last for years. With new technologies for knee arthroplasty like computer-aided navigation and robotic-assisted surgery, this allows for more accurate implant positioning, reducing risk of injury to adjacent tissues and assist with quicker recovery.

#### RISKS OF NOT TREATING OSTEOARTHRITIS

Osteoarthritis is debilitating. Not only is the chronic pain exhausting, but there are a number of other ways in which OA can negatively impact your life, including:

- Anxiety and depression the symptoms and the pain can wear you down and begin to affect your mental health and enjoyment of life.
- Reduced productivity as it becomes more difficult to move around, at time performing even the most normal of everyday tasks becomes challenging.
- Weight gain It becomes part of the spiral. We find it difficult and painful to remain mobile, and begin to lack the desire to move. This in turn leads to weight gain, which exacerbates the problem and can lead to other related complications.
- Muscle continue to waste and weaken.

### MENISCUS TEAR

The meniscus performs an important function in our knee. When it tears, that function becomes compromised. Find out more here.

#### TYPICAL SYMPTOMS

- Pain
- Swelling
- Reduced mobility (bending and straightening)
- Knee 'locks up' or gets stuck

#### **COMMON CAUSES**

As we get older, the effectiveness of our meniscus becomes less so, with a reduced capacity to absorb shock and pressure in the joint. This reduced capacity puts the meniscus at more risk of tears from even minor trauma, or acute injuries such as a twist or fall.

#### MENISCUS TEAR TREATMENTS

#### NON-OPERATIVE

#### **PHYSIOTHERAPY**

If your tear is only small, it will generally respond well to physiotherapy treatments, which aim to strengthen your knee and lower limbs, as well as normalising the range of motion and alignment in vour knee.

#### **MEDICATION**

Pain medication, anti-inflammatory drugs and analgesics often form the bulk of medication therapy for these knee injuries.

#### **INJECTIONS**

With such injuries, you'll often hear of cortisone injections being used. This can help to reduce the inflammation within the joint, but will not help to heal the tear in your meniscus.

#### SURGICAL TREATMENT

In those more minor meniscus tears, surgery can often be delayed or avoided altogether, without the tear impacting on your normal enjoyment of life. However, when symptoms begin to make your normal activities painful and difficult, surgery to repair or trim the damage may be considered.

#### ARTHROSCOPIC SURGERY

Meniscus tears are often treated via arthroscopic surgery, wherein a miniature camera is inserted through a small incision to provide a clear view inside your knee. Through other small incisions, your orthopaedic surgeon will then perform one of the following procedures:

#### PARTIAL MENISCECTOMY

This is when the damaged portion of your meniscus is trimmed away.

#### **MENISCUS REPAIR**

Depending on the condition of your meniscus and the type of tear it has, it may be repaired by stitching the torn pieces together.

#### RISKS OF NOT TREATING MENISCUS TEARS

While it's true that some more minor meniscus tears can remain stable and asymptomatic over time, there are some types of meniscus tears that simply won't heal without treatment. Some tears may continue to cause clicking and locking with significant pain. Meniscus tears can be the first sign of arthritis developing in the knee.

## LIGAMENT INJURIES

When our ligaments are stressed beyond their capacity, ligament injuries can occur. It begins with a specific trauma on your knee. Here's what you can then expect:

#### TYPICAL SYMPTOMS

- Sudden pain and swelling
- Difficulty running, walking or putting weight on your leg
- Subsequent joint instability

#### COMMON CAUSES

As we've mentioned, ligament injuries are most commonly caused by a trauma or external force forcing our knee to move or bend in a way that it was not designed to move. Twisting, falling, sports accidents - these incidents of trauma can damage our cartilage and ligaments in our knee, with older people being at a higher risk.

#### LIGAMENT INJURY TREATMENTS

#### NON-OPERATIVE

Most ligament injuries in the older population can be treated in a brace and with physiotherapy.

#### PROTECTIVE KNEE BRACES

If your doctor decides that a knee brace is necessary, it will help to limit your range of movement in your

knee, provide some extra support and help to prevent further injury. Using a brace will allow you to gradually regain movement and motion in your knee.

#### MUSCLE-STRENGTHENING EXERCISES

Your doctor or physical therapist may suggest muscle-strengthening exercises, where you will be given a range of different exercises to strengthen your quadriceps, hamstrings, calf and hip. When shown how to do these exercises properly by your physical therapist, they will help to strengthen and stabilise your knee.

#### SURGICAL TREATMENT

If your ligament injury is significant, surgery may be required. This will generally involve replacing the ligament with a tendon from the kneecap, hamstring or quadriceps, to help hold the knee joint together.

In some ligament injuries, other areas of the knee are also involved and require surgery to repair. However, in most cases, ligament injuries will heal well without surgery.

#### RISK OF NOT TREATING LIGAMENT INJURIES

An injured ligament that is not treated leaves the knee joint quite unstable, which may lead to osteoarthritis if left untreated.



# The Difference.

ST VINCENT'S PRIVATE HOSPITAL MELBOURNE ORTHOPAEDIC CARE

St Vincent's Private Hospital Melbourne performed over 10,000 orthopaedic surgeries in 2018. We have an enviable reputation for orthopaedics in Australia and around the world. As a centre of excellence for orthopaedics, we attract local, interstate and international sports stars. Our commitment to the specialty is evident in the delivery of safe and high quality healthcare and is what really stands St Vincent's Private apart.

#### MELBOURNE'S LEADING ORTHOPAEDIC SURGEONS

Many of the state's most experienced orthopaedic surgeons consult on site at St Vincent's Private Hospital or are located within immediate proximity. Our surgeons specialise in many areas of orthopaedic expertise like joint replacement surgeries including hip, knee, ankle, wrist, shoulder and elbow; orthopedic interventions including sport medicine and injuries; and tumour and reconstructive surgery.

#### STATE OF THE ART THEATRES

Our theatres are equipped with the latest technology and instruments to support our surgeons in providing the best treatment plan for patients and to help patients achieve the best outcome. We are one of the first hospitals in Victoria to have the Mako Stryker system. Stryker's robotic-arm assisted surgery is a minimally invasive treatment option. The robotic arm is controlled by the surgeon and allows for tactile, auditory and visual feedback and limits the bone preparation to the diseased areas. It provides customised implant positioning, placement and real time adjustments for each individual patient.



#### HIGHLY EXPERIENCED TEAM

Our orthopaedic unit has dedicated nursing and allied health staff who are highly trained and well experienced in managing all orthopaedic conditions. Our primary theatre nurses have all undergone additional orthopaedic specialty training. All of which means our surgeons have a great sense of trust in our medical teams care and capacity to identify clinical issues.

#### **ON-SITE REHABILITATION**

Our purpose-built on-site inpatient rehabilitation facilities at both <u>East Melbourne</u> and <u>Werribee</u> hospitals provide assistance for patients recovering and reconditioning from surgery and injury.

Our outpatient rehabilitation programs continue to aid patients in their recovery even after they return home, and also includes vital exercise programs.

Our rehabilitation therapy spaces include brand new purpose built gymnasiums, indoor hydrotherapy pool with change rooms and shower facilities and therapy areas designed for practicing everyday occupations including our home-style kitchen.

#### PAEDIATRIC ORTHOPAEDIC

Our paediatric unit is the busiest and longest running private paediatric unit in Victoria. The unit is proud to have many highly regarded leaders in the field of paediatric orthopaedics mostly working both at The Royal Children's Hospital and privately at East Melbourne.

There are two on-site clinics catering to paediatric orthopaedic patients.

The <u>St Vincent's Kids Hip Dysplasia clinic</u> allows patients to see an orthopaedic hip specialist, with low radiation paediatric X-rays and ultrasounds all on-site. Paediatric bracing and orthotic services are also provided within the rooms, along with specialised physiotherapy and rehabilitation services.

The <u>St Vincent's Kids Sports Injury clinic</u> provides patients with the benefit of reduced waiting times to see a specialist. The clinic can provide patients with scanning, bracing and rehabilitation facilities in one easy location as well as timely access to surgical management if required.



#### ST VINCENT'S PRIVATE HOSPITAL MELBOURNE **ACCREDITED HIP AND KNEE SURGEONS**

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