# **Risks Associated with Total Hip Replacement Surgery**

- There is no such thing as "Risk-Free" Surgery
- Total hip replacement is **MAJOR** surgery

If we run through the risks in a logical stepwise manner based upon the steps in the operation:

- Incising the skin will cause Bleeding
  - The risk of significant bleeding that would require a blood transfusion is now low – less than 5%
- When you bleed, even a small amount, your body will start to clot the bleeding. This is normal. In some instances, your body may clot in areas we don't want it to. The example here is a **Deep Vein Thrombosis or DVT**. These usually form in the veins of the calf, but can form in any vein in your body.
  - The risk is approximately 0.5-1%
  - If it is a large clot, you will likely need strong blood thinners for up to 3 months to prevent any further clot and help open the clotted vein
- When we make a cut in your skin, it is a portal into your body which bacteria can gain access and cause an **Infection**. Deep infection around the joint replacement is call Periprosthetic Joint Infection or PJI. PJI is a serious complication and will require further surgery or surgeries to try and eliminate the infection. **Infection risk is around 1%**.
- Malposition of components
  - $\circ$   $\;$  This is uncommon but can lead to dislocations or irritation of tendons
- Dislocations
  - $\circ$   $\;$  This is when the ball of the hip joint pops out from the cup
  - $\circ$   $\,$  This usually can be put back (enlocated) in the ED, but sometimes needs to be done in the operating theatre
  - If it happens more than once, sometimes you may need to have the hip revised to reduce the risk of further dislocations
  - The life time risk of dislocation is around 3% (Dutch Study)
- Fracture of the bones around the hip
  - We sometimes use press-fit components which are pressed into your bone and gain their stability by friction
  - o It is very uncommon, but a fracture can occur
  - $\circ$   $\;$  Usually, the fracture is noticed during the operation and repaired

### • Leg length Inequality

- $\circ$  We can make your leg longer or shorter with total hip replacement surgery
- We try to make your legs the same length
- We usually achieve equal leg lengths
- $\circ$  As long as we are within 5mm, you usually cannot tell the difference
- o Robotics helps with getting the leg lengths equal most times
- Sciatic nerve palsy
  - $\circ$  The risk is 1:1000
  - o The sciatic nerve runs just behind the hip joint

- o It is palpable when performing total hip replacements
- $\circ$   $\;$  It is always protected and carefully looked after during surgery
- $\circ$   $\;$  It is possible to damage the nerve during surgery
  - The most common way the nerve is injured is via traction or compression
- An injury to the nerve causes a foot drop and numbness on the same leg
- Most sciatic nerve injuries improve, but not all

## • Incomplete Relief of Pain

- $\circ$   $\;$  This can occur for a few reasons
- There may be another source that is referring pain towards the hip region
  - Backpain from arthritic facet joints in the spine can radiate pain towards the buttock and hip region. This may only become noticeable once the hip has been replaced
  - Nerve entrapment pain from the L1 or L2 nerve root can refer pain to the hip region
  - The abductor tendons can have tears prior to surgery which cause pain following surgery

## Iliopsoas Tendonitis

- $\circ$   $\;$  This is an uncommon problem, but can be very annoying
- $\circ$   $\;$  The Iliopsoas tendon runs over the front of the hip joint  $\;$
- $\circ$   $\;$  It can get irritated after total hip replacement surgery
- $\circ$   $\;$  This can be due to a prominent edge of the acetabular cup
- o Usually, it settles on its own but may require
  - Steroid injection
  - Tenotomy (cut the tendon) to relieve the pain
  - Revise the acetabular component

## • Aseptic Loosening

- This is when either the femoral stem or the acetabular component's fixation in the bone begins to loosen from mechanical forces over time
- $\circ$   $\;$  It is becoming less common with better implants and bearing materials
- $\circ$   $\,$  If it occurs it usually causes pain in the groin or thigh and may necessitate revision
- The NZ Joint Registry shows 90% total hip replacements last at least 15 years.
- DEATH
  - This has to be mentioned
  - The risk is around **0.18%** in NZ
    - There are higher risk patients and lower risk patients
    - The anesthetist/surgeon will inform you if they feel you are a high-risk patient