

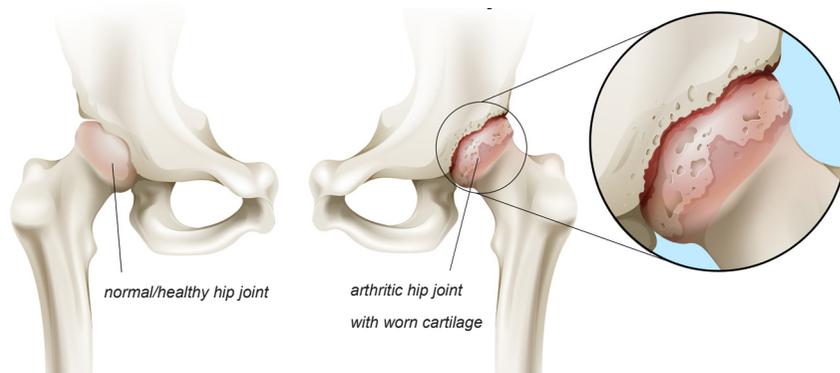
## Total Hip Replacement

### Hip Arthritis

Hip arthritis can be an extremely debilitating condition. This occurs when the lining of the hip joint, the cartilage, wears out. This occurs due to a combination of genetic and environmental factors. This loss of cartilage leads to the underlying bone on either side of the joint becoming exposed. Rather than cartilage articulating against cartilage, bone articulates against bone. This subsequently leads to inflammation within the joint, which presents as pain.

The pain may be so severe as to interfere with one's ability to carry out normal activities of daily living such as walking, sitting for long periods of time, putting on socks and shoes, clipping toe nails or to have a good night's sleep. Non-operative management includes activity modification, walking aids, simple analgesia such as paracetamol and anti-inflammatories, injections into the hip joint, physiotherapy, core strengthening exercises including pilates and weight loss.

The current scientific evidence does not support the use of stem cells.



Hip arthritis



Right hip arthritis with loss of joint space



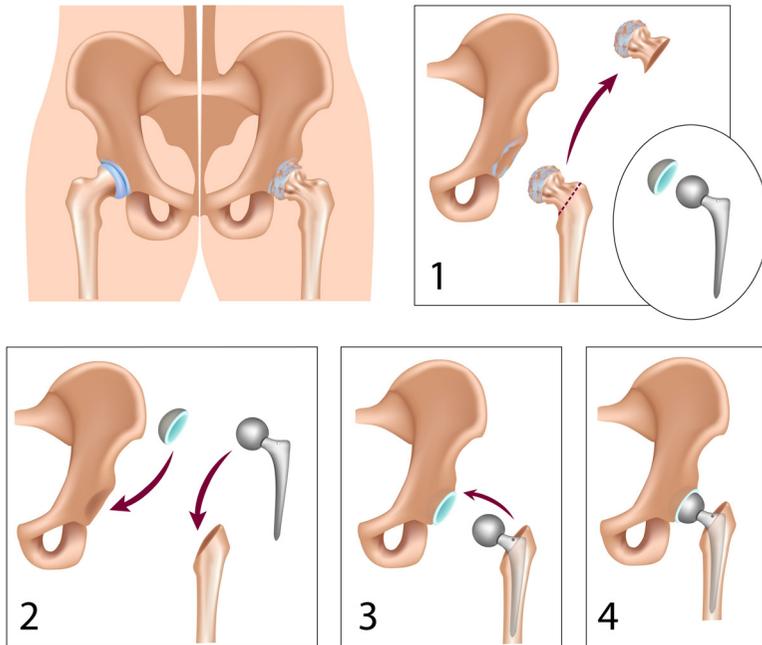
Total Hip Replacement Postoperative XRay

### Total Hip Replacement

This is considered once a trial of the appropriate non-operative management has failed.

Total hip replacement is widely considered to be one of the most reliable operations in surgery in terms of providing pain relief and restoring function. It is a highly successful operation and with improvements in implant design and surgical technique, the current generation of hip replacements generally have a survivorship of greater than 95% at 10 years (less than 5% chance of requiring revision surgery within 10 years). Complications including infection, nerve injury, bleeding, blood clots, fracture and dislocation can happen, but are becoming increasingly rare with current techniques.

The hip joint which consists of a ball (femoral head) and socket (acetabulum) are replaced. The new artificial ball is supported by a metal stem which is inserted into the thigh bone. Although the stem and the socket are generally made of metal, the bearing (articulating) surfaces themselves are usually not. There are many different types of bearings available but current scientific evidence favours either ceramic on ceramic or ceramic on highly cross linked polyethylene bearing surfaces. The stem and the socket are held in position either via polymethylmethacrylate (bone cement) or via a press fit (cementless). These different methods of fixation have different advantages and disadvantages. Similarly, there are several different approaches which can be used to approach the hip joint. Generally speaking, an anterior (front) or posterior (back) approach can be used. Once again, each approach has its own advantages and disadvantages. Computer assistance is also used during surgery with the aim of improving the accuracy of



*Total Hip Replacement Surgical Steps*

component placement, reducing the risk of complications and prolonging longevity of the implants. Dr Lau has extensive experience and training with all the different implants, approaches and technology available in modern hip replacement surgery and tailors each operation to the individual patient's demands and anatomy.

The operation usually takes 60-90 minutes. It is performed under a combination of general anaesthesia and a spinal anaesthetic, to minimize the amount of postoperative pain. This is usually followed by a hospital stay of 3-5 nights. A longer stay in the rehabilitation ward can be organized if necessary. Walking usually starts on the next day, if not the same day. At the time of discharge, patients are independently mobile, usually with crutches or a walking stick. Walking aids are usually discontinued by weeks 4-6. As brake response time takes 4 weeks to return to normal, driving is not permitted until then. Physiotherapy usually continues until week 6 from surgery, as an outpatient.