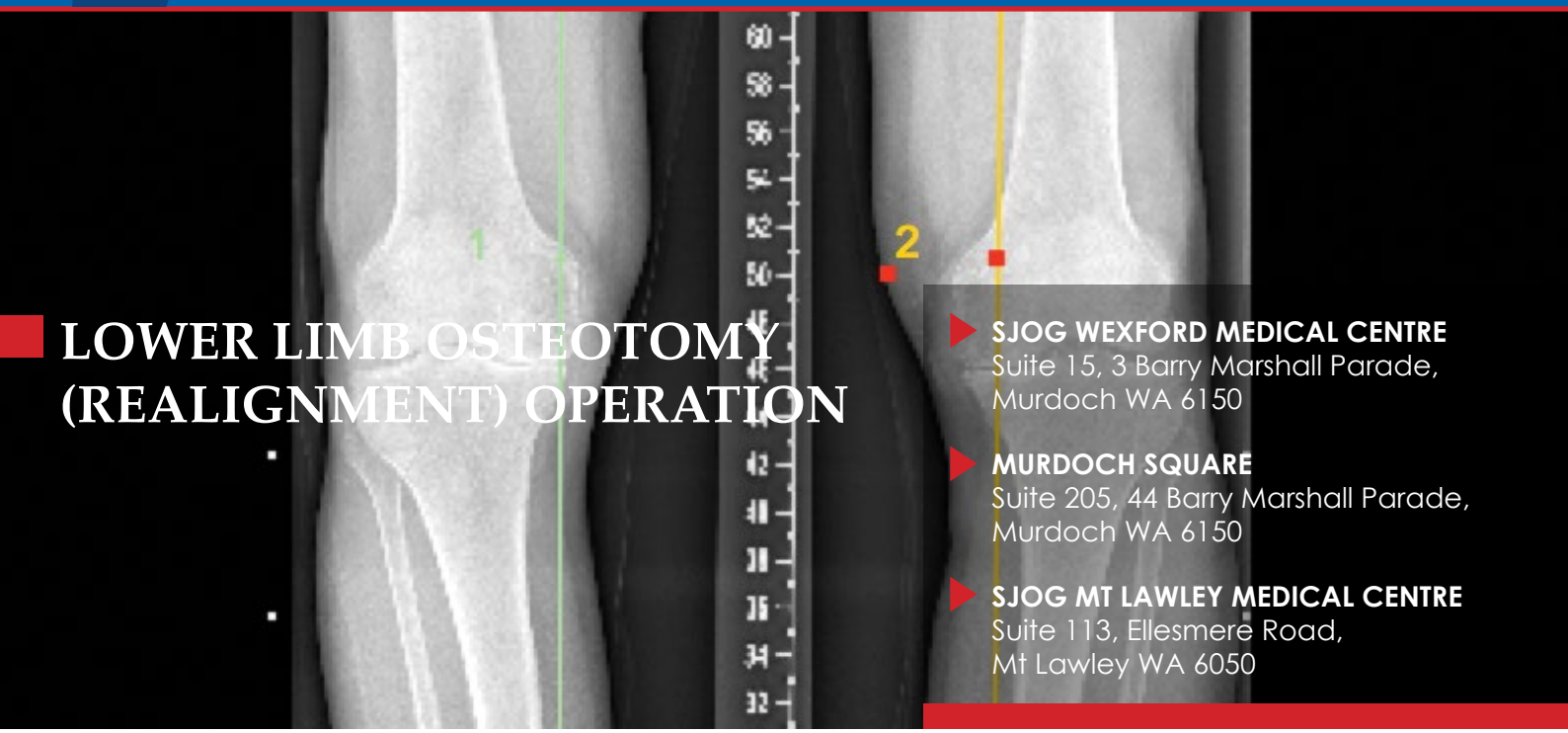
ORTHOPAEDICS WA

(08) 9312 1135



LOWER LIMB OSTEOTOMY (REALIGNMENT) OPERATION

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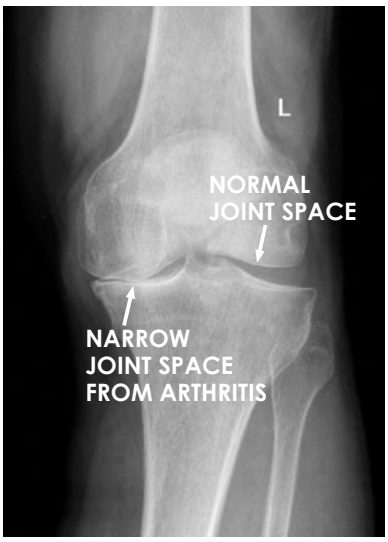
BACKGROUND

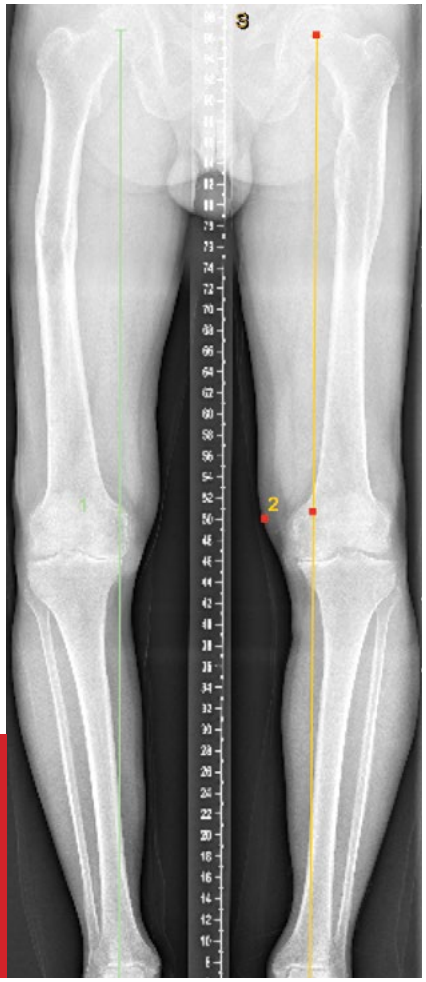


Osteoarthritis (wear and tear arthritis) most commonly affects the inner side of the knee joint. As the disease process advances, the cartilage on the inner side wears away. This, often in combination with a tear in the meniscus (cartilage shock absorber) leads to pain on the inner aspect of the joint. This also leads to a change in alignment of the leg. If you look in the mirror, you may notice that your knees have become more "bandy" or "bow legged". This makes the situation worse as rather than spreading your weight evenly throughout the knee when you walk, the weight is concentrated in the diseased area of the joint.

Osteotomy is an operation that "re-aligns" your leg so that the weight is redistributed through the normal side of your knee.

WHO IS SUITABLE

Osteotomy is particularly useful when arthritis develops in younger and middle aged patients. There are no specific age limits but as a guide it is most commonly performed in 30-50 year olds. The arthritis has to be located in one side of the joint only. It is often indicated in patients who have had part or all of their meniscus removed. The operation is not suitable in smokers due to poor bone healing.



BOW LEGGED ALIGNMENT

MECHANICAL AXIS PASSING THROUGH INNER BEARING (YELLOW LINE)

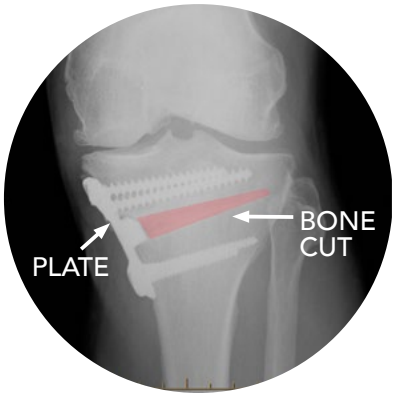
WHAT ARE THE BENEFITS

Osteotomy is a powerful treatment for arthritis that delays the need for knee replacement. It allows patients to keep their "native" knee and is therefore considered a "joint preserving" procedure. It preserves range of motion in the knee and is particularly suitable in manual workers. Studies have shown that it delays the need for knee replacement by on average 9 years. It is important to understand that because the arthritic side of the joint is not removed but simply un-loaded, some ongoing symptoms from the knee can be experienced. Overall a reduction in pain of 70-100% can be expected.

WHAT ARE THE ALTERNATIVES?

Your surgeon will talk to you about the alternative options of non-surgical management, partial knee replacement or total knee replacement. Preoperatively a trial using a brace is often tried to prove that the osteotomy is likely to work.

HOW IS THE SURGERY DONE?



Under an anaesthetic, an incision is made on the inner aspect of the leg, just below the level of the knee joint. A controlled cut is then made in the tibia (shin bone). The gap is gently opened up which has the effect of changing the alignment of the tibial bone. Once the desired correction has been made, a plate with screws is used to stabilise the bone. Xrays are used during the operation to confirm the alignment of the leg. Sometimes bone graft is placed into the gap.

WHAT ARE THE RISKS?

Although generally very successful, as with all operations there are some risks involved: These include infection and wound problems which may require further surgery or antibiotics. Blood clots in the calf or lung can occur and often medicine will be used to help prevent this. Rarely there can be damage to nerves and blood vessels or ligaments around the knee. Occasionally there may be a delay in the bone healing. Often the plate and screws can be irritating under the skin and require removal but only once the bone has healed. Over many years the rest of the knee may wear out and conversion to a knee replacement may be required.

WHAT ABOUT RECOVERY?

Most patients spend one to two nights in hospital. You will start off using crutches, putting only some of your weight through the knee. The amount of weight is increased steadily over the first 6 weeks and generally patients are off crutches between 6 and 12 weeks after surgery. Once the wound is healed it is good to get in the pool. Physiotherapy will help with further recovery. Driving is possible after around 4-6 weeks. Xrays will be taken periodically until the bone heals. Return to work in an office type job can be between 3-6 weeks. A manual job requires 8-12 weeks to allow return to work. Overall recovery can be expected between 3 and 6 months but rarely it can take a year for the bone to fully heal.

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