

Trauma & Orthopaedic Directorate

Osteotomy around the Knee

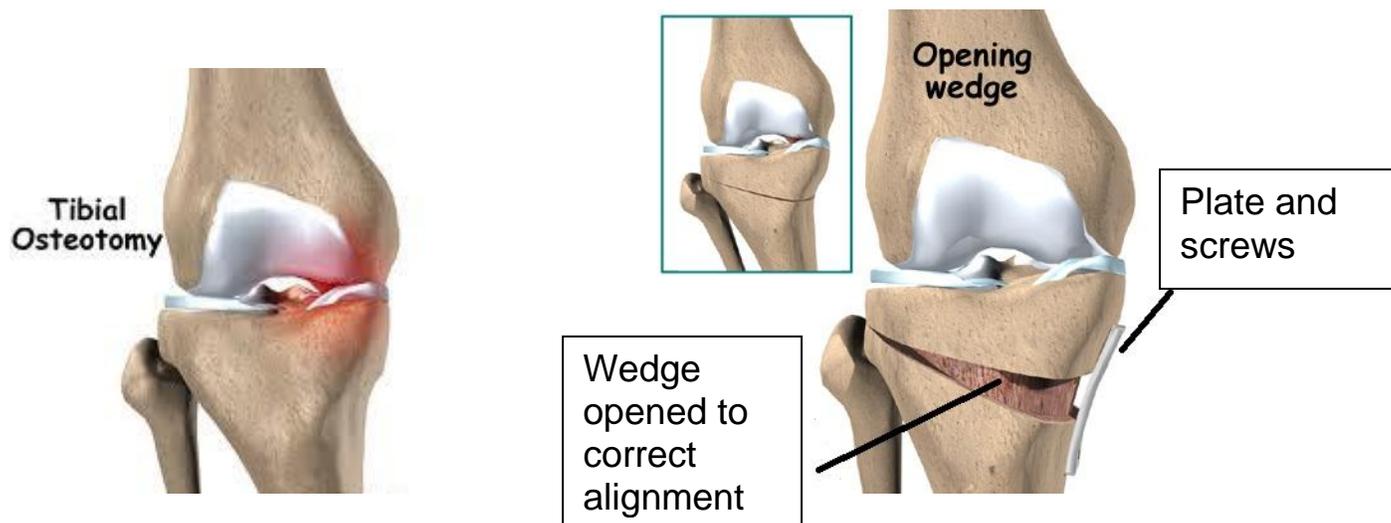
What is Osteotomy?

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Osteotomy is a surgical procedure performed around the knee joint to relieve pain and improve function in patients with early arthritis affecting one side of the knee. It is often used in younger patients as it preserves your own knee joint.

Osteotomy works by **re-aligning the leg** and taking pressure off the painful part of the knee. This relieves pain and delays further progression of the arthritis and deformity.

Most commonly the inner (medial) part of the knee is affected and the patient may be slightly 'bow-legged' (varus alignment). An osteotomy in the upper shin bone (**high tibial osteotomy**) will re-align the leg and move pressure from the inner (medial) side of the knee onto the healthy outer (lateral) side.



In some patients the outer (lateral) part of the knee is painful and a 'knock-knee' (valgus alignment) is present. Under these circumstances the osteotomy is usually performed in the lower thigh bone (**distal femoral osteotomy**).

During the operation accurate surgical cuts are made in either the tibia (shin bone) or femur (thigh bone) to achieve the planned correction. The corrected bone is held firmly in place with a metal plate and screws.



Front view



Side view

An **arthroscopy** (keyhole surgery) may be performed at the same time as the osteotomy to fully assess the knee and allow the surgeon to trim torn meniscus cartilage or treat articular (joint surface) cartilage damage.

Results of Osteotomy?

Most patients (80 – 90%) feel a dramatic improvement in their knee after Osteotomy surgery. The re-alignment of the knee means activities of daily living are usually much less painful. Many patients can return to sports such as tennis, skiing and golf. An advantage of osteotomy is that you keep your own knee joint (unlike in knee replacement surgery). If symptoms deteriorate later in life a knee replacement is still possible.