

## Knee Preservation Surgery

Joint preservation procedures of the knee are innovative ways to solve common joint problems, such as early osteoarthritis, without requiring full replacement. There are both surgical and non-surgical preservation procedures.

The aim of most joint preservation procedures is to repair any bone damage and reconnect any broken bones or torn ligaments that may cause the joint to not function properly. Non-surgical knee preservation techniques include braces, casts or crutches.

### Surgical Techniques Used for Knee Preservation Surgery

#### High tibial osteotomy

This is where metal plates, screws, or pins are used to stabilise the bone. They are placed alongside the breakage point and are used to hold the displaced bones in the proper location so they can heal correctly. In many instances, the plates and rods are not surgically removed once the healing process is finished. This is only done if they become cumbersome.

#### Arthroscopy

This requires a small incision, into which an arthroscope is inserted to see inside the injured area. Once inside, the surgeon is able to clear out any damaged tissue, allowing the joint to heal properly.

#### Patellofemoral Reconstruction

Occasionally, disorders of the kneecap are the cause of early development of knee arthritis. This may be as a result of injury (such as traumatic kneecap dislocation) or a long-standing knee alignment and/or ligamentous laxity leading to maltracking or dislocation. Surgery to reconstruct damaged ligaments such the medial patellofemoral ligament (MPFL) or to correct the bony anatomy can help minimise further damage and preservation of the knee.

#### Osteotomy

This is a surgical realignment of the bones to offload areas of damaged cartilage. This can improve knee function for many years to come.

#### Resurfacing

Instead of replacing the entire joint, implants are used to resurface areas of damaged cartilage without having to sacrifice other areas of relatively healthy cartilage.

#### Half knee replacement

Also known as unicompartmental knee replacement (UKR), this procedure replaces only one side of the knee joint. The benefits are quicker recovery, better bending and a more normal feeling knee than with a full knee replacement.

Whether you require arthroscopy or robotic assisted knee surgery, your surgeon will discuss all your options and what treatment is beneficial for you, if a surgical procedure is required. First and foremost, the decision to undergo surgery will always be the decision of you, the patient.