

Robotic-Assisted Knee Replacement Explained

A patient guide

MR TOFUNMI ONI · CONSULTANT ORTHOPAEDIC SURGEON · HIP & KNEE

You may have read about robotic surgery and wondered what it really means, and whether a robot is doing your operation. It is a fair question. This guide explains, in plain terms, what robotic assistance adds and what it does not change.

Who is actually doing the operation

Your surgeon is. The robot does not make decisions or operate on its own. It is best thought of as a very precise tool that Mr Oni controls throughout. It helps him plan the operation around your individual knee and carry out that plan accurately, but the judgement, the skill and the surgery remain his.

How it works

Before and during the operation, the system builds a detailed three dimensional picture of your knee. Mr Oni uses this to plan exactly how the new joint should sit and how it should balance as your knee bends and straightens. During surgery the robotic arm helps him position and prepare the bone to that plan within fine margins, and gives live feedback so adjustments can be made there and then.

What it aims to give you

The goal is a knee that is well aligned and well balanced, because how a replacement is positioned has a great deal to do with how natural it feels and how long it lasts. The evidence suggests robotic assistance can improve the accuracy of implant placement and may be gentler on the surrounding soft tissues, which can mean less discomfort early on for some patients. It is a tool in the service of a good result, not a shortcut around good surgery.

What it does not change

Robotic assistance does not remove your part in recovery. The exercises, the gradual return to activity and the patience are the same as for any knee replacement. It is also not automatically right for every knee, and Mr Oni will tell you honestly whether it adds anything in your particular case.

Worth remembering: The biggest factor in your result is the surgeon and the plan, not the brand of technology. The robot helps deliver that plan precisely.

This guide gives general information and is not a substitute for the personalised advice of Mr Oni and your physiotherapist. If you are worried about your symptoms or your recovery, please contact the practice.