Robot-Guided Partial Knee Replacement

Robot-guided partial knee replacement offers a new treatment option for those living with painful early to mid-stage osteoarthritis of the knee, affecting only one or two components of the knee, and who prefer a less invasive surgery and more rapid recovery than total knee arthroplasty.

The entire procedure only requires a four to six inch incision over the knee. Tactile, intelligent robotic arm technology and three-dimensional visualization of the knee guides the surgeon in controlled resurfacing of the pre-defined area, saving as much of the patient's healthy bone and surrounding tissue as possible.

Using CT scan data, the surgeon follows a three dimensional computer model of the patient's pre-surgical plan. During the procedure, real-time visual, tactile and auditory feedback facilitates ideal implant positioning and placement.

It is this level of planning and surgical accuracy in treating earlier stage knee osteoarthritis that can result in a more natural feeling knee and motion.

In many cases, patients are permitted to walk soon after surgery, drive a car within two weeks and return to normal daily activities shortly thereafter.