

WHAT IS HIP RESURFACING?

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Hip resurfacing is a bone conserving alternative to conventional total hip replacement (THR). Unlike THR, hip resurfacing does not involve the removal of the femoral head and neck nor removal of bone from the femur. Rather, the head, neck and femur bone are preserved in an effort to facilitate future surgery should it be necessary and to enable the patient to take advantage of newer technology or treatments in the future.

Hip resurfacing has been attempted since the earlier 1960's with poor results. The current generation of hip resurfacing devices utilise a metal-metal bearing rather than the metal-polyethylene bearings that were utilised in the 1970's and 1980's. In 1993 a group of surgeons from Birmingham, UK released a metal on metal hip resurfacing called the McMinn Hip Resurfacing with early good results, it was later termed the Birmingham Hip Resurfacing in 1997.

These metal-metal bearings have demonstrated a much higher level of wear resistance as well as reduced bone loss (osteolysis) about the hip joint as compared to metal-polyethylene bearings. Hip resurfacing is anatomically and biomechanically more similar to the natural hip joint because the joint is not removed and it generally results in increased stability, flexibility and range of motion.

Dislocation is extremely low and return to normal function is quicker. Higher activity levels are typically obtained because the head diameter that results from resurfacing is very similar to the patient's normal head diameter (versus the smaller conventional THR head) thus the hip is more stable and feels more normal. International hip replacement registries show that a significant number of patients under the age of 60 at the time of total hip replacement have a relatively high

failure rate of their hip within 10 to 15 years.

The advantage of preserving the femur with hip resurfacing is that in the future it can still be easily converted to a total hip replacement, and this is much easier than revision of a failed total hip replacement. Thus hip resurfacing is especially suited to young active patients who will likely wear out a conventional hip in their lifetime. Hip resurfacing is technically more

difficult than a total hip replacement, and although the dislocation rate is very low

there is a small risk of hip fracture following surgery (usually < 1%)

This means hip resurfacing should not be performed on people with osteoporosis and caution with those over the age of 70 years who would be better suited to a total hip replacement. The current designs

of the Birmingham Hip Resurfacing have been around for more than 13 years and the designer's series greater than 16 years.

The results are excellent particularly for young active patients and allow a continued level of high activity including recreational sports. They also do allow for conversion to a conventional total hip replacement later should failure occur. Hip resurfacing is an excellent option for people with hip arthritis to consider, particularly if they are young and would normally out live a conventional hip replacement.

