Femoral Component Options for Hip Surgery



Hip Surgery Terminology

Acetabulum - Socket Femoral head - Ball

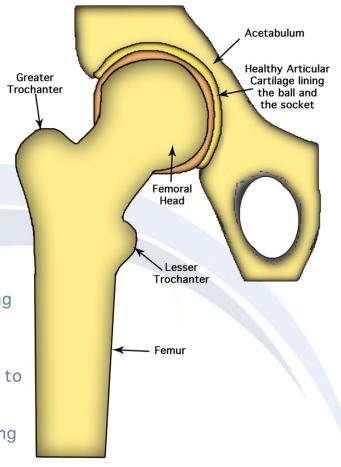
Component - Prosthesis Acetabular cup - Acetabular

prosthesis

Short stem - BMHR Long femoral stem - THR

Artificial hip devices are used in patients with severe arthritis and irreversible loss of the lining cartilage of the joint.

Although total hip replacement (with the long stem) can be used in any adult, it is preferable to use a less extensive device such as the Birmingham Hip Resurfacing (BHR) or the Birmingham Mid-Head Resection (BMHR) in young patients.



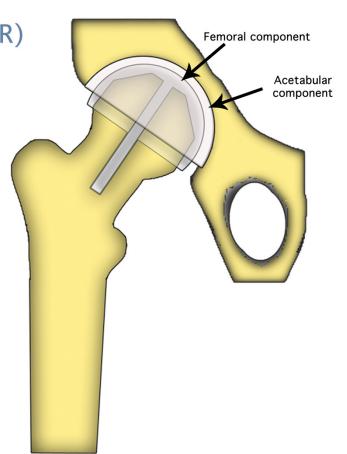
Birmingham Hip Resurfacing (BHR)

 The BHR is performed on young and active patients whose femoral head bone quality is good.

 The femoral head is prepared to accept the new femoral component of the resurfacing.

The BHR consists of two components;

- 1. Acetabular cup
- 2. Femoral head





Femoral component

Acetabular

component

Birmingham Mid-Head Resection (BMHR)

 The BMHR is performed on young and active patients whose femoral head bone quality is relatively poor (i.e. not strong enough to support the resurfacing prosthesis).

 The poor quality bone of the femoral head is removed down to the bottom portion of the ball joint leaving good quality bone which is suitable to accept the slightly larger stem.

The BMHR consists of three components;

1. Acetabular cup

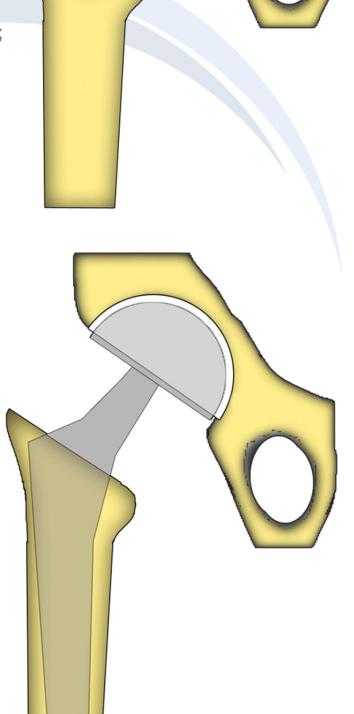
2. Femoral head component

3. Short stem

If the femoral component of a BHR or a BMHR fails, it can be replaced with a THR stem (see below) and a matching head without having to change the cup.

Total Hip Replacement (THR)

- The THR is performed on patients whose femoral head and neck bone quality is relatively poor (i.e. not strong enough to support either the BHR or the BMHR). It may also be needed in situations where the anatomy of the hip makes it unsuitable for the use of a smaller procedure.
- The femoral head and part of the femoral neck are removed leaving good quality bone which is suitable to accept and support the long femoral stem.
- The THR consists of three components;
 - 1. Acetabular cup
 - 2. Femoral head component
 - 3. Long femoral stem



Short Stem