Surgical Treatment of Arthritis of the Hip

By Thomas J. Haverbush, M.D.
Orthopaedic Surgeon

This is a very large subject that we have to cover today. I feel that we can cover it in a way that will give you the important information you need.

Dr. John Charnley, a British Orthopaedic Surgeon is generally credited with the development of the total hip procedure as we know it today. Others before him had tried various means and failed. In the 1960’s at his hospital in England, Professor Charnley began to search for materials that would withstand the forces of the human body on the hip joint. He had his share of failures, but eventually settled on a plastic polyethylene material for the socket (acetabulum) and a metal alloy of chrome and cobalt for the ball that fits in the socket and stem that is anchored in the thigh bone.

In the early years the parts were held in the bone by acrylic bone cement. While bone cement is still used a lot in orthopaedic surgery the newer components are made so the patient’s bone grows into them and grips them therefore bypassing the need for bone cement.

So a total hip replacement always includes replacement of the ball and socket. Any procedure less than that is not a total hip.

I have used several types (models if you will) of hip prostheses, but settled on the AML total hip system manufactured by DePuy, Inc. in Warsaw, Indiana. I have been to the plant twice to watch the manufacturing process which is amazing. But, I digress!

In a total hip you want longevity and AML is still going strong in over 95% of patients after twenty years. I am confident that the hip prosthesis now in use will last way beyond the ten years originally predicted in the 1970s when they were first done in the United States.

Total hip replacement is usually acknowledged as the greatest advance in the history of our specialty of Orthopaedic Surgery. There have been many advances of course, but as a group total hip replacement patients have been the most satisfied and grateful patients.

Changes in pain management and surgical technique over the years have allowed earlier activity and therefore earlier hospital discharge.
Average hospital stay now is 3–4 days. Occasionally less, sometimes more because of a tremendous variation in our patients’ general state of health, degree of arthritis, body size, etc.

**Materials**

Please don’t get caught up in what procedure someone else had or what you read on the Internet is the “newest and best”. It is up to me as a surgeon to figure out what combination of components best suits your needs. It gets really confusing for most patients. There are different kinds of metal sockets and articular hip balls. There are metal, polyethylene and ceramic components that are mixed and matched on an individual basis. I might add, there are a huge variety of sizes and shapes of total hip prosthesis components to match the needs of all patients.

**Hip Resurfacing**

Nothing new under the sun applies here. There has been a renewal of interest in a limited procedure that places a metal cap over the properly prepared and shaped femoral head and a new metal socket on the acetabular side. It is called hip resurfacing and this procedure provides two highly polished metal surfaces as the new hip joint. The procedure is generally reserved for a younger and more active age group than traditional total hip replacement. Not all surgeons agree on who should have the procedure and how much activity the person should be allowed. In 15–20 years we will know how it stacks up with traditional total hip replacement.

The thinking is that if it doesn’t hold up a hip resurfacing can be converted to a more traditional total hip replacement. Hip resurfacing has its own set of risks and complications just like regular total hip.

It is a very big decision for a patient and often their family to proceed with a total hip replacement. A discussion with the surgeon and accessing good information available on [www.orthopodsurgeon.com](http://www.orthopodsurgeon.com) / Your Orthopaedic Connection is invaluable.

In the problem of hip arthritis and total hip replacement, the statement I always close with applies exactly.

Our goal is simple – to help people return to more pain free, functional lives.

Be well.

Dr. Haverbush