The Total Hip and Knee Replacement Surgery Newsletter

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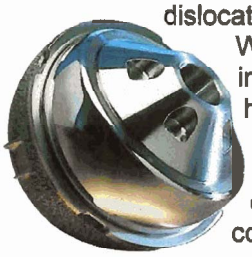
The Magnum M2A: The Newest Metal-on-Metal Hip Implant System.

by Michael C. Welch, MD

During the last five years many of our total joint patients have been recipients of the most recent advancements that biomaterial technologies has to offer, in the form of the metal-on-metal hip system. Much has been learned about metal-on-metal hip systems since their inception. Over the last fifty years, metal-on-metal hip implants have evolved to become what many think is the best hard bearing total hip implant available today.

The early metal-on-metal hip implants of the 1950's and 1960's lost favor over the traditional metal-on-plastic hip implant because the forces and torque created by the early metal-on-metal hip implants could cause premature loosening. Through the 1980's and 1990's, the orthopaedic implant community began it's abandonment of cemented stems on plastic liners since failure rates had risen significantly secondary to wear debris leading to loosening of implant components.

Since it's inception, the original Biomet M2A hip system has had a few face lifts along the years. It started as a modular design with a standard size 28mm metal head. The initial design was the 28mm M2A, followed then by the 32mm and the 38mm femoral head size. Advancements in design and wear evaluations determined that the larger the diameter of the femoral head, the more the reduction in wear and the lower likelyhood of a prosthetic hip dislocation. Until November of 2004, the largest available femoral head size was 38mm.



With the introduction of the Magnum M2A system, the femoral head size is proportional to the implanted cup size (38mm-60mm). With the increased head sizes the range of motion of the total hip dramatically improved. The initial M2A design allowed for 122 degrees of movement while the Magnum allows even more movement at 162 degrees. The larger sizes of the Magnum metal ball mimics the normal size of the human hip leading to lower dislocation rates and greater range of motion and function after surgery. Using today's materials, the life of a well cared for total joint could reasonably extend to 25-30 years in many cases.

Education, The Internet and YOU !

How do you know where to go to find out what the best type of total joint is for you? How do you know if you even need joint replacement surgery? Want more information on hip or knee arthritis? Want to learn more about osteoporosis or prevention of injuries? Want to review the ideal exercise program for arthritis? Want links to the most up-to-date information in the total joint world?

Below we have listed two major websites that by linking to marked topics, you can see live lectures on arthritis and small incision surgery, study the differences between metal, ceramic and plastic joints, or even see pictures of our very own patients with their individual stories and x-rays.

Please feel free to bring any questions that may arise to your next office visit.

http://www.biomet.com

http://orthodoc.aaos.org/MichaelWelchMD

We are on the Move... Union Centre Office

We are pleased to announce that we are expanding our services and service locations to better fit the needs of our patients. Wellington Orthopaedics has opened a new office in Butler County at 8737 Union Centre Boulevard. Dr. Michael Welch will continue to offer arthritis care for the hip and knee, as well as total joint replacement care in our West Chester office on Friday's. We will continue to care for our patients at the Christ medical office building in Clifton and at our Creek Road office in Blue Ash. We hope this additional location and hours of operations will provide patients with an improving access to care. If you should need to contact the Union Centre Office, the new telephone number is 645-2220.

After ten very happy and successful years our base of operations will be departing the Christ medical office building.

We will be relocating our total joint office to the Blue Ash office. Our patients should be aware that the impact of this on our practice should be minimal, likely just a telephone number change. But if you are stopping by to say "HI" to Sarah, she will be living glued to the telephone at Blue Ash when we move in June.

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Minimally Invasive Surgery (MIS) with Rapid Recovery; What every patient needs to know.

During the last five years our total joint patients have enjoyed smaller and smaller surgical incisions. Many patients equate a small incision on the skin of the hip to be the definition of minimally invasive surgery. Patients, understandably so, are attracted to the idea that small skin incisions can mean a more rapid recovery. In some cases and conditions, MIS has contributed to a quicker recovery from total joint surgery. However, there are two key points that patients should be aware of: 1.) Smaller skin incisions have not greatly altered the invasive nature of the total joint surgery that occurs deep to the skin. For example, with the new Magnum Metal-on-Metal Hip System, a three inch incision in the deep part of the hip is about the smallest size possible to permit the large implant to be placed into the joint, and 2.) Both the size and diagnosis of each individual patient determines the appropriate surgical approach for ultimate success of the operation. One of the most significant advancements in total hip replacement is the recognition that the procedure can be done with less invasive techniques which allow the patient to recover faster. We do currently use new state of the art surgical instruments that allow us to significantly shrink the patient's deep incision to the smallest, safest dimension (which in turn does reduce the skin incision size), without compromising the long-term success of the prosthetic joint implant.

What do we know about the effectiveness of small incision surgery as compared to traditional incisions? The facts are that just this April, the first scientific paper comparing results and complications on small and standard incision patients was published in a major orthopeadic journal. In terms of blood loss, time in hospital, pain, and return to activity, there are very little differences between the two groups. In practice, we will need many more unbiased and scientific studies to evaluate the long-term effectiveness and safety of minimally invasive total joint surgery. The jury is really still out.

It is important to understand that regardless of the size of an incision, many other factors impact the post surgical experience. Among these factors include the patient's positive attitude, general good medical health and fitness level, and as well, anesthesia type, post- operative pain management, participation in accelerated physical therapy and expedient supportive home discharge planning. For the well being of our patients, we have optimized all of these factors that influence the speed and ease of recovering from total joint replacement surgery. Of these issues, post- operative pain management is initiated with regional nerve blocks, long acting medications left in the surgical site to counteract pain and IV anti-inflammatory medications administered during the surgical procedure. Because of these measures, almost all of our total joint patients wake up quite comfortable with little or no discomfort for the first few post operative hours. We have worked very closely over the years with the nursing staff to ensure that pain management remains the highest priority for all of our total joint patients. Many factors contributing to an accelerated or rapid recovery may be out of the direct control of the physician thus patients vary greatly in their response to a smaller incision or minimally invasive total joint surgery.

The Summer Fun of Golfing with a New Total Joint

Now that the summer is almost here the time has arrived to talk about the golfing season. We know that many of our new total joint patients have already hit the links this year because the telephone calls have begun.

Whether you've played golf for years or are interested in trying it for the first time, that new total joint doesn't have to slow you down. Just remember these few tips before you hit the tee. First, always loosen up before you play. Begin by walking for a few minutes. Spend at least 10 to 15 minutes stretching, then take 10 to 15 easy and gentle practice swings before hitting your first shot. Now the time has come for the first match of the season. For all new total joint patients who are at least 12 weeks out from their joint surgery...go play golf backwards!!!! (We also advise the players behind you of your bizarre medically advised behavior.) As crazy as it may sound we suggest that you start at the first hole by playing short putts from the green. Keep increasing your putting distance until you are comfortable with the putting swing. The next shot should be a short chip shot. Continue increasing the distance of the chip until you are comfortable. Following the chip shot, move back to a mid- fairway shot and again increase the distance until you are comfortable and find yourself back to the tee. Now that you are back in the groove of the game of golf and your new joint is just fine ... fore!

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