

## HOT TOPICS

### **Package Pricing Program**

Dr. Kolisek, working with the Indiana Orthopaedic Hospital (IOH), has developed a package pricing program for primary hip and knee replacement, as well as partial knee replacement. This program offers a unique option of payment for our international patients, or those who choose to seek care outside of traditional insurance programs. We offer a single price that covers preoperative testing, hospital care and postoperative follow-up care. Physicians fees, implant costs, medicines and even necessary durable medical equipment are covered in this one price. Because we are a single specialty hospital, we can offer world class orthopaedic services at very competitive rates. For more information, please contact Dr. Kolisek's office directly.

### **New Surgical Pain Management Techniques**

Always looking for ways to improve the postoperative experience and improve patient outcomes, Dr. Kolisek utilizes a "multimodal" pain management protocol for all knee and hip replacement patients. This protocol begins with preoperative medications taken one to two days prior to surgery to help stop pain before it begins.

gists will use nerve blocks specifically designed for either a hip or knee replacement to keep you comfortable. Then, medicines to limit postoperative nausea and vomiting, and multi-modal pain medications are used to treat different pain pathways after surgery. Put together, this protocol is helping patients feel better and have less pain at the same time.

### **Minimally Invasive Hip and Knee Replacement**

There has been intense patient interest regarding "minimally invasive" joint replacement surgery recently, much of it media generated. While there is no universally agreed upon definition of what "minimally invasive" means, many surgeons claim to be using it. Dr. Kolisek has worked to reduce incision length and tissue trauma during joint replacement, making these operations less invasive to the body. The goal is to hasten short term recovery, while maintaining longevity and long term success of these operations. Studies are ongoing to determine whether these minimally invasive techniques produce better outcomes or are simply cosmetic.



*Post-operative room at IOH.*

### **Computer Assisted Orthopaedic Surgical Navigation**

For years, orthopaedic surgeons have used guides and jigs to aid them in placing knee and hip implants in the appropriate position during a joint replacement operation. Furthermore, early failure of a total joint replacement can result from improperly positioned knee and hip implants during surgery. The recent development of computer navigation may help reduce this complication.

Navigation utilizes a PC based program that helps the surgeon make accurate decisions regarding alignment and orientation of joint replacement implants. New technology introduced in 2007 allows us to avoid placing additional pins in the bones outside the operative field and simply mount the device right on the joint surface. This surface mounted technology is now available and in use at IOH by Dr. Kolisek.

Dr. Kolisek has been a leader in bringing this technology to use. In Indiana, Dr. Monesmith was the first to use it for a total knee replacement and Dr. Kolisek was the first to use it with a minimally invasive hip replacement. Both surgeons continue to refine its use to benefit patients who have joint replacement surgery.

### **Alternative Bearings for Hip Replacement**

Traditionally, the bearing surface for a total hip replacement consisted of a metal ball and polyethylene (plastic) cup. While this has worked extraordinarily well for many years, there is wear associated with this bearing couple,

hip replacement over many years. Because of this, the goal has been to develop bearing couples that have less wear.

Ceramic on ceramic bearings are one such development. Ceramic bearings are extraordinarily hard and have very low friction. Utilizing a ceramic ball on the femoral stem, and a ceramic liner in the socket, there is a dramatic reduction in the amount of wear created by a hip replacement. Recently, concerns over squeaking noise emanating from ceramic hip replacements have led to less enthusiasm for the use of these bearings. Likewise, the more widespread use of metal on metal bearings has led to an increase in complications with this bearing as well. Fortunately, the plastics used in hip replacement have been dramatically improved in past few years. Because of recent developments in technology, the plastics used in modern hip replacement have improved durability, and are nearly equal to hard bearings such as ceramic. In the lab, on hip simulators, these third generation polyethylene cups wear as well and as long as the ceramics. Thus, our current choice for younger, highly active patients is a ceramic ball on third generation polyethylene cup liner. This combination offers best wear resistance with least potential complications.

Overall, we believe that a well done total hip with an appropriate bearing should last 20 to 25 years.



*IOH Operating Room.*

*IOH uses computer navigation to help the surgeon make accurate decisions regarding alignment and orientation of joint replacement implants.*