Baptist Health and Jacksonville Orthopaedic Institute offering MAKOplasty® total hip replacement
Robotic arm technology provides new level of precision

Jacksonville, Fla., May 6th, 2015 – Baptist Medical Center Jacksonville and the Jacksonville Orthopaedic Institute are the first in north Florida and southeast Georgia region offering MAKOplasty® Hip Arthroplasty. This technology is the latest innovation in total hip replacement surgery performed using the RIO® system, a highly advanced, surgeon-controlled robotic arm that enables the accurate alignment and positioning of implants.

Baptist Medical Center Jacksonville has offered MAKOplasty® partial knee resurfacing using the RIO system since 2012.

MAKOplasty Hip is designed to assist surgeons in attaining a new level of reproducible precision in surgery, to restore patients’ confidence in their mobility and help them return to active lifestyles. The procedure is for patients who have non-inflammatory or inflammatory joint disease.

The benefits of MAKOplasty may include more rapid relief from pain, shorter hospital stay and a quicker return to daily activities when compared to traditional knee or hip replacement surgery. The procedure results in a more natural feeling hip following surgery and patients usually walk soon after surgery and return to normal activities within two weeks.

Orthopedic surgeons Steven Crenshaw, MD, and Brett Frykberg, MD, with Jacksonville Orthopaedic Institute, are performing the MAKO hip surgery.

“Getting implants positioned correctly is an important aspect in improving surgical outcomes and the lifespan of the implants used for hip replacement,” Dr. Crenshaw said. “The robotic arm technology enables us to more accurately achieve the biomechanical alignments that are planned to fit the patient’s unique anatomy.”

Accurate alignment and positioning of implants using traditional manual total hip replacement techniques can be challenging. The RIO system provides a patient-specific 3-D image of the patient’s hip based on a pre-operative CT scan. Using the 3-D model, the surgeon can then plan the optimal size and position of hip implant components. An implant consists of a cup and liner placed in the acetabulum or the socket of the pelvis, and a femoral component with a femoral head and stem. The position of these components is critical for proper biomechanical reconstruction of the hip.

“MAKOplasty allows us to put the components in the exact position in relation to the rest of the patient’s pelvis,” Dr. Frykberg said. “Nobody is built the same. With MAKOplasty we can preoperatively, using the CT scan and software, map out where the cup is going to be placed and determine exactly the amount of bone that will be removed before we make the incision. MAKOplasty allows us to navigate the best possible positioning for the total hip replacement and minimizes the amount of bone that needs to
During surgery, RIO provides visualization of the joint and biomechanical data to guide the bone preparation and implant positioning to match the pre-surgical plan. First the surgeon prepares the femoral bone for the implant and subsequently measures the femoral component’s position with the RIO. The surgeon uses the robotic arm to accurately ream and shape the acetabulum, and then implant the cup at the correct depth and orientation. Finally, the surgeon implants the femoral implant and RIO provides summary data to confirm the hip implants are aligned according to plan.

The MAKOplasty procedure may be a good option for patients with symptoms that are not responding to medication or physical therapy, who also experience:

- Pain while putting weight on the affected hip
- Limping to lessen the weight-bearing pressure on the affected hip
- Pain that may radiate to the groin, lower back, or down the thigh to the knee
- Hip pain or stiffness during walking or other impact activities

For more information on MAKOplasty Hip or to make an appointment for an evaluation, call 904.JOI.2000.