Does Alignment Matter?
Jeremy McCandless, M.D.

Few people aside from engineers and precision junkies appreciate the importance of proper alignment. Those few people who have vehicles with a million plus miles know that two things are important to durability. First, it takes precision placement of quality components. Second, it takes attention to routine maintenance. I’d like to discuss the first as it relates to joint replacement. Does alignment of joint implants matter for durability?

Most people assume that joint implant placement is dictated by each patient’s anatomy. While this is partially true, we know that there is an ideal alignment for each implant. Much like the tires on a car, there are proper tolerances within which we know patients will have a more reliable long term outcome. Anyone who has changed a tire on their car that was out of alignment knows that one side of the tire receives disproportionate wear and tear. The same is true for all joint implants. Sure, a poorly placed implant will last the equivalent of short-term mileage. It will never last for the long haul due to disproportionate wear.

Our motto is “precision joint replacement.” This means we take alignment factors inherent to each patient into account and place an implant in each patient with appropriate alignment to last as long as possible. We, unlike many other joint replacement surgeons, are willing to take the extra time necessary to use state-of-the-art instruments coupled with computer navigation and robotic technology to precisely align each component to maximize the long-term utility to each patient. Yes, joint implant alignment matters.

Dr. Jeremy McCandless is a board-certified, fellowship-trained orthopedic surgeon. He received his medical degree and completed an internship in general surgery at the Case Western Reserve University College of Medicine in Cleveland, Ohio. He completed his residency and fellowship in orthopedics and joint replacement at the University of Utah. Dr. McCandless specializes in adult reconstruction of the hip, knee, and shoulder.

Subvastus Approach to Knee Surgery Helps Save Muscle
Trevor Magee, M.D.

There has been a recent emphasis on minimally invasive and muscle-sparing approaches in orthopedic surgery for both hip and knee. There is general agreement about the great value of knee replacement surgery, with approximately 500,000 knee replacements performed annually in the United States. The success rate is now over 98 percent.

There is some uncertainty as to the best surgical approach to the knee joint. Most orthopedic surgeons utilize the muscle-splitting incision to perform a total knee replacement. The traditional approach involves a larger incision with division of the quadriceps muscle mechanism. This is effective but slows down rehabilitation.

We prefer the subvastus, muscle-sparing approach on our patients. The subvastus approach to the knee joint was described and published by the Hofmann team more than 20 years ago as an alternative to the traditional approach.

Multiple studies have now confirmed our experience utilizing this approach. The many advantages include significantly earlier return of straight-leg raise, lower consumption of narcotic pain medicine in the first week, less blood loss, and greater pain-free knee flexion after one week. The subvastus approach definitely offers many advantages over the standard muscle-splitting incision. Ask your surgeon if you are a candidate for this approach.

Dr. Trevor H. Magee received his medical degree from George Washington University School of Medicine and Health Sciences in Washington, D.C. He is a hip and knee replacement specialist and completed a fellowship at the University of Utah along with a Penn State orthopedic surgery residency and general surgery internship at the Milton S. Hershey medical center in Hershey, PA.

Patient Testimonial: Wilford Brimley

Wilford Brimley, nationally recognized actor and Utah resident, is a satisfied Hofmann Arthritis Institute patient. He says, “Partial knee replacement—it’s the right thing to do!”

We appreciate the opportunity to work with patients like Mr. Brimley—and all our other patients as well—to make life more enjoyable through joint replacement surgery.

VIP Treatment at the Center for Precision Joint Replacement

At our new third floor facility at Salt Lake Regional Medical Center, we are now pleased to offer the following in every patient room:

- Private massages
- Hot towels
- Freshly basked cookies
- Aromatic accommodations

In addition, all of the rooms have enough space to accommodate walkers and wheelchairs, enabling our patients the mobility they need to begin rehabilitation and recovery.

Spotlight: Zoë Adler, M.D.

Zoë A. Adler, M.D., provides nonsurgical joint and spine care at the Hofmann Arthritis Institute. She earned her medical degree from the University of Utah and completed a transitional internship in medicine and surgery at Intermountain Medical Center. She also completed residency training in physical medicine and rehabilitation at the University of Utah. Dr. Adler serves as adjunct faculty with the University of Utah Department of Physical Medicine and Rehabilitation.

Dr. Adler specializes in musculoskeletal and electrodiagnostic medicine. She also conducts nerve conduction studies, EMGs, ultrasound and fluoroscopically guided lumbar spine and joint injections. Dr. Adler has also trained in acupuncture and regenerative medicine and provides evaluation for these services.

Her professional associations include the American Academy of Physical Medicine and Rehabilitation, International Spine Intervention Society, and American Institute of Ultrasound Medicine.