

Surgical Navigation Study Shows Better Implant Alignment

A study performed at the St. Cloud Hospital by Dr. Joseph Nessler has shown that use of the Stryker surgical navigation system leads to improved implant position in total hip replacement.

Other research has shown that if a total hip prosthesis is not implanted in an optimal position, that the long-term outcomes can be affected. Improved implant positioning will lead to lower dislocation rates and less wear of the prosthesis. This may result in a longer lasting and better functioning hip replacement.

Dr. Nessler studied patients having muscle sparing hip replacement performed with the use of surgical navigation. The patients received post-surgery CT scans to accurately measure the position of the implanted hip prosthesis. The results of the study confirmed that by using surgical navigation, accuracy could be increased, and the prosthesis positioning could be estimated to within an average of 2 degrees.

Dr. Nessler states, “this study confirms other studies that show that the Stryker surgical navigation system brings surgery into the ‘computer age’ allowing surgeons to perform hip and knee replacement more accurately without relying on older, less accurate, mechanical alignment devices.” Dr. Nessler now routinely uses computer navigation in the majority of his total hip and knee surgery cases