Study Shows Hip Resurfacing a Viable Option for Younger Patients

March 4, 2009 (Las Vegas, Nevada) — Patients who have undergone hip resurfacing report significantly better quality of life, less pain, and more satisfaction a year after their surgery than those who underwent total hip replacement, according to a study presented here at the American Academy of Orthopaedic Surgeons (AAOS) 2009 Annual Meeting.

When it came to functional activities, more patients who received hip resurfacing than [who received] total hip replacements were very satisfied with their surgeries,” said lead researcher Elizabeth Anne Lingard, MD, from Freeman Hospital, in Newcastle Upon Tyne, in England. There was also a trend among hip-resurfacing patients toward more satisfaction with recreational activities, although this did not reach significance, Dr. Lingard said.

In the prospective study of 214 total hip-replacement and 132 hip-resurfacing cases, researchers used data from a joint registry from a single surgeon’s practice from July 2003 to December 2006.

All patients completed a questionnaire, which included the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) and the SF-36, preoperatively and 1 year after their procedures. One year after surgery, they also filled out a questionnaire regarding satisfaction with their procedures. Patient sex, height, weight, and comorbid medical conditions were recorded. The WOMAC and SF-36 scores were adjusted for sex, age, and comorbid conditions.

Patients in the hip-resurfacing group had fewer comorbid medical conditions than those the total hip-replacement group. Hip-resurfacing patients were also more likely to be younger (mean age, 49 years vs 67 years; P < .0001) and men (68% vs 42%; P < .0001) than total hip-replacement patients. Preoperatively, both groups of patients scored in the moderate to severe range of the WOMAC score, indicating pain, functional limitation, and stiffness, Dr. Lingard said.

One year after surgery, both groups experienced significant improvements in WOMAC and SF-36 scores. However, WOMAC scores were significantly better for hip-resurfacing patients only in assessment of pain symptoms. SF-36 scores showed significant differences between the 2 groups, with a 7- to 17-point greater improvement in hip-resurfacing patients for the physical and social domains of the questionnaire (P < .05).

"These differences are clinically significant and they’re perceptible to patients on an individual basis,” Dr. Lingard said.

When asked about patient satisfaction with the surgery, there was little difference between the 2 groups in terms of pain relief. A total of 89% of the hip-resurfacing patients and 85% of total hip-replacement patients said they were very satisfied. However, a significantly greater number of patients in the hip-resurfacing group said they were very satisfied with their ability to take part in functional activities after surgery.
"We have to question the ceiling effect of the WOMAC score, given that hip-resurfacing patients were more satisfied with their outcomes," Dr. Lingard said. She recommended that future studies assessing patient-reported outcomes for hip surgery use the Hip Disability and Osteoarthritis Outcomes Score (HOOS), a 40-item questionnaire that assesses pain, symptoms, activities of daily living, sport and recreational function, and hip-related quality of life.

"This is a good early comparative study, although I would have liked to see results at 2 years," said Rocco Monto, MD, from Monto Orthopedics, in Martha's Vineyard, Massachusetts, and an AAOS spokesperson. "Patients in the hip-resurfacing group were 20 years younger and in much better shape, but that tends to be true of most hip-resurfacing patients," he added. "You need to have good-quality bone to avoid complications with alignment in hip resurfacing, so it's a surgery that's more appropriate for a younger population."

Dr. Monto noted that hip resurfacing is still an emerging technology, but one that is catching on with his younger patients who need hip surgery. "They're more demanding than older patients, and want to rock climb and play tennis after their surgeries," he said.

He noted that the use of partial-joint replacements is becoming more popular in orthopaedics, and that the use of partial-knee replacements and shoulder resurfacing is increasing. "These are important innovations for younger patients," he said.

Dr. Lingard has received research funding from DePuy, Smith & Nephew, and Stryker; and support in the form of equipment or other services from Smith & Nephew and Stryker. Dr. Monto has disclosed no relevant financial relationships.


For Full Article click here