

Charnley Total Hip Arthroplasty Has Good Long-Term Record

Physical Therapy in Twin Falls and Buhl for Hip

The Charnley hip replacement has been around since the 1960s, when it was pioneered as a low-friction hip replacement. Hip replacements (arthroplasties) are, in general, one of the most carefully watched and followed surgeries in the United States, including the Charnley replacement. The authors of this article wanted to update the results of hip replacement recipients 35 years or more after they received their replacement.

To perform the study, researchers used records of 262 patients who had received, altogether, 330 Charnley hip transplants when they were an average of 65 years old. Most (74 percent) had osteoporosis, followed by rheumatoid arthritis (5 percent). Some of the hips had had previous surgeries. Among the 262 patients, 249 had died before this study (with 314 hips total) and one was lost to follow-up. This left 12 patients (15 hips) were left to study. Seven were women (nine hips).

Looking at the long-term follow up over the 35 years after surgery, the researchers found that 290 of the patients had their original hip implant at the time of the study or at the time of their death. Seven of the patients who were alive still had to undergo a hip revision surgery at one point. Among that revision group, one hip had to have yet another surgery because of loosening. Of course, the longer the patients lived, the higher the chances of hip revision surgery. This is seen in these statistics:

- 15 percent of the hips required revision at 20 years after surgery
- 23 percent required revision at 25 years after surgery
- 32 percent required revision at 30 years after surgery
- 47 percent required revision at 35 years after surgery

The authors concluded that studying long-term outcomes of hip replacements gives researchers a good basis from which they may work on newer designs that may be functional for even longer periods.

Reference: John J. Callaghan, MD. et al. Survivorship of a Charnley Total Hip Arthroplasty. In Journal of Bone and Joint Surgery. No. 91. Pp. 2617 to 2621.