



CLINICALLY RELEVANT QUESTIONS

Life Expectancy of a Total Hip Replacement

There are many conditions that lead to degeneration of the hip joint and the eventual need for hip replacement. Total hip replacement surgery continues to be the treatment of choice for debilitating primary osteoarthritis, the major indication for 70% of hip operations.

Other indications include:

- hip dysplasia with or without dislocation
- hip fracture
- rheumatoid arthritis, and
- avascular necrosis



Primary Right Hip OA



Primary Total Hip Replacement (THR)

The positive effect that total hip replacement surgery has on the quality of life of patients is enormous and is well established. Total hip replacement surgery is, however, challenging for both the surgeon and the patient. Keeping up to date with developments in this particular area of orthopaedic surgery is the key to providing patients with the best advice and achieving the best results for them.

A commonly asked question is:

“How long can I expect this hip replacement to last?”

Evidence based medicine means being able to support your practice with the facts and figures available from current relevant research. Below is a selection of published, longitudinal studies which give us the best answers to the anticipated survival of total hip replacements (both cemented and uncemented/porous).



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I'm at Macquarie University Hospital

Macquarie University Hospital (opening June 2010) will be Australia's first University co-located Private Hospital offering specifically post-graduate medical education, i.e. they will be training only specialist doctors in many surgical specialties, including Orthopaedics. The state-of-the-art facility will feature the latest technology and most up to date patient amenities available. In addition, Macquarie University Hospital aims to eventually become "paperless" with all records and test results stored on computer and available to doctors by secure login at the foot of the patient's bed.

I will be one of the group of Orthopaedic Surgeons starting work there in my sub-speciality of Joint Replacement. I will be contributing to the education of Fellows from the second half of this year.



Investigators have consistently reported survival rates of more than 90% for hip replacements at 10 years (and even beyond).

Cemented hip replacement:	92% @ 10 years, 83% @ 15 years ¹
Cemented stem:	90% @ 25 years ²
Porous cup:	95.7% @ 15 years ³
Porous stem:	86.8% @ 15 years ³
Porous cups (variety):	95-100% @ 10 years ⁴



It is important to inform patients that all hip replacements have a limited life expectancy, which will vary from patient to patient depending on their size, their weight and other variables. Re-operation (revision) may be required in the long term.

1. Garellick, G., Herberts, P., Strömberg, C. and Malchau, H. Long-term results of Charnley arthroplasty: A 12-16-year follow-up study. J. Arthroplasty 1994; 9:333-340.
2. Buckwalter, A.E., Callaghan, J.J., Liu, S.S., Pedersen, D.R., Goetz, D.D., Sullivan, P.M., Leinen, J.A. and Johnston, R.C. Results of Charnley total hip arthroplasty with use of improved femoral cementing techniques. A concise follow-up at a minimum of twenty-five years of a previous report. J. Bone Joint Surg. Am. 2006; 88:1481-1485.
3. Parvizi, J., Sullivan, T., Duffy, G. and Cabanela, M.E. Fifteen-year clinical survivorship of Harris-Galante total hip arthroplasty. J. Arthroplasty 2004; 19:672-677.
4. Engh, C.A., Hopper R.H. and Engh, C.A. Long-term porous-coated cup survivorship using spikes, screws, and press-fitting for initial fixation. J. Arthroplasty 2004; 19:5452-6052.