Cementless total hip arthroplasty (THA) using alumina ceramic-on-highly cross-linked polyethylene (HXLPE) bearings is widely used in patients <30 years old.

However, there is a paucity of long-term data on fixation of the components and the prevalence of osteolysis.

Long-term outcomes of cementless THA assessed.

Medical records of 45 patients treated with alumina-on-HXLPE bearings.

No cases of acetabular or femoral osteolysis.

Mean follow-up of 17.8 years.

Survival rate:
- Femoral component: 98%
- Acetabular component: 96%

Clinical data:
- Harris hip scores: Follow-up 1 (mean 10.8 years) - 95, Follow-up 2 (mean 17.8 years) - 94
- WOMAC* scores: Follow-up 1 (mean 10.8 years) - 11, Follow-up 2 (mean 17.8 years) - 13
- UCLA** activity scores: Follow-up 1 (mean 10.8 years) - 6.7, Follow-up 2 (mean 17.8 years) - 6.5

Radiography and CT scan of hip.

Cementless THA with alumina-on-HXLPE bearings in younger patients shows good long-term clinical outcomes with no evidence of osteolysis.

Eighteen-Year Results of Cementless THA with Alumina-on-HXLPE Bearings in Patients <30 Years Old: A Concise Follow-up of a Previous Report

Kim et al. (2020) | DOI: 10.2106/JBJS.19.01157

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