CUP RE-ENFORCEMENT FOR RECURRENT DISLOCATION

AFTER HIP REPLACEMENT

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Recurrent dislocation after total hip replacement usually demands revision. Ahnfelt (1986) reported 626 dislocations of which 79 (11.2%) dislocated twice, 33 (5.1%) three times and 40 dislocated (6.6%) four times. We now report the results of treating 13 cases of recurrent dislocation by fixing an additional sector to the posterior rim of the acetabular component after Charnley total hip replacement.

Patients. Of the 13 patients, seven were women and six men. Their mean age was 70.9 years (range 57 to 81). In 11 patients a posterior approach had been used for the primary replacement; in the other two an anterolateral approach.

The interval between hip replacement and the first dislocation varied considerably; two patients dislocated within the first 14 days, three after two months, one after six months, four after one year and three after more than four years. The earliest dislocation (three days after replacement) was due to retroversion of the acetabular component; other early dislocations were caused by high inclination of the acetabular component. Four patients with a high anteverision angle and inclination dislocated with adduction and internal rotation. In two patients no errors of alignment were found. Early dislocations occurred particularly in four patients whose hips had been replaced following femoral neck fracture.

Technique. We used the technique described by Olerud and Karlström (1985). The re-enforcing sector was fixed to the posterior rim of the acetabular prosthesis with two to four 3.5 mm diameter cancellous screws in nine cases and with two or three 4.5 mm diameter cortical screws, in four cases. The screws broke in five of the nine cases fixed with cancellous screws; two cortical screws broke in one case.

Results. During one year of follow-up only one of our patients has redislocated. Before cup re-enforcement this patient had dislocated six times. Two cancellous screws had been used and these both broke.

The range of movement after cup re-enforcement was not limited in our series, nor was there any ectopic calcification.

Conclusion. When recurrent dislocation occurs, cup re-enforcement by the method of Olerud is a simple and effective treatment unless serious alignment errors are present.

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REFERENCES
