Total elbow arthroplasty in patients with rheumatoid arthritis.

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Introduction:

Total elbow arthroplasty (TEA) is considered a suitable surgical option in cases of advanced rheumatoid arthritis of the elbow. TEA is, however, associated with a higher occurrence of complications than is usual for large-joint replacements. We present our results with the semi-constrained Discovery R prosthesis

Patients and material

39 elbows in 37 patients with rheumatoid arthritis were evaluated. The mean age of the patients at the time of surgery was 62.4 years (range, 30 to 78 years).

We used the Mayo Elbow Performance Score (MEPS) and the Oxford Elbow Score (OES) to evaluate the outcome of surgery. All patients had recent x-rays to monitor radiolucencies. Mean follow-up was 3.9 years (range, 1 to 8 years).

Results:

All patients experienced pain relief after surgery. 35 elbows were free from pain (90%). The range of motion improved after arthroplasty. Flexion of more than 110° was achieved in most elbows. MEPS values after surgery improved to 70-100 points

Shallow radiolucent lines were detected in only a few cases.

We had no revisions except one (1.7%) because of early deep infection. One patient suffered a periprosthetic fracture (1.6%) that healed without surgery.

Conclusions

The Discovery total elbow replacement is at present considered the method of choice at OUH. The prosthesis provides good functional outcomes. Complication rate remained low during the follow-up period.