One-stage shoulder elbow prosthesis

Introduction:
There is often an indication for performing an arthroplasty of multiple joints in the same upper extremity but only a few studies have been published on the results after arthroplasty of an ipsilateral shoulder and elbow. This study will report on the results of this group and of 11 patients with a one-stage ipsilateral shoulder and elbow arthroplasty.

Patients / Methods:
In a consecutive series of 231 primary arthroplasties of reumatoid elbows operated since 1982 43 elbow replacements were combined with a replacement of the ipsilateral shoulder. In 11 patients (13 upper limbs) the shoulder and elbow arthroplasty was performed as a one-stage procedure. All patients were scored clinically and radiographically before the operation and at regular intervals afterwards. For the assessment of the elbows the score of Souter was used. For the shoulder the HSS 100 point scoring system was used. The one-stage procedures were studied as a separate group.

Results:
After elbow arthroplasty most of the patients improved with regard to pain and function and the average gain in the arc of flexion was 22°. The HSS score of the shoulder improved from 41 preoperatively to 62 postoperatively and the flexion with 45°. Complications will be discussed and the results will be compared with one-stage procedures.

Conclusion:
One stage arthroplasty of the shoulder and elbow should be considered in reumatoid patients with advanced destruction of both joints.