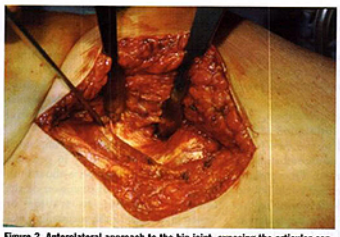

Figure 2. Anterolateral approach to the hip joint, exposing the articular capsule, before opening by a T-shape incision, which allows access to the fractured femoral neck.

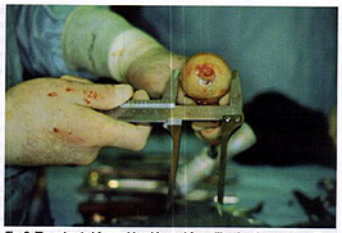

Fig. 3. The extracted femoral head is used for calibrating the cup size. Measurement in different diameters is necessary because of the slightly elliptic shape of the femoral head.

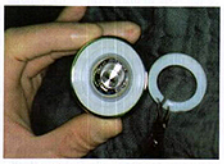

Figure 4a. Inserting the head into the cup with the locking-ring removed assembles cup and head of the prosthesis. After insertion of the head, the ring is placed in the notch of the polyethylene-inlay of the cup.

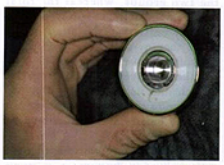

Figure 4b. The bipolar head, ready for the in-situ assembly to the cone of the prosthesis' stem, which is implanted into the proximal femur.

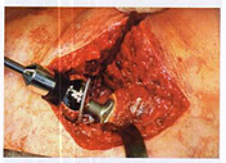

Figure 5. Repositioning the hemiprosthesis into the acetabulum, directing the prosthesis' head, while an assistant performs the reposition maneuver.

ance resection level and length of the femoral neck, different heads can be used. Connecting the bipolar head to the stem and repositioning of the joint are the final steps to completion of the implantation. After controls for dislocation, muscular tension, and length of the limb, the wound is closed, leaving several vacuum drains which are removed after 48 hours.

POSTOPERATIVE CARE

Most patients can return to the ward immediately after operation; in cases of severe concomitant diseases, the patient spends the first day in the intensive care unit. Mobilization begins under the supervision of physiotherapists from the first postoperative day. The patient begins assuming seated and prone positions for short periods on the first day, followed by taking the first steps after wound drains are removed the second or third day. On approximately the 10th day, patients who had lived alone or with their families before hospitalization are transferred to a rehabilitation unit, where further training takes place. During this time, social assistance or nursing care are then organized in preparation for discharge from the hospital.

MATERIAL AND METHODS

To evaluate the results in elderly patients, the authors performed a retrospective outcome study on all types of fractures of the femoral neck and pertrochanteric region, in which patients who had been treated by hemiarthroplasties and by total hip-replacement were evaluated as therapy-groups. Female patients of more than 60 years of age at the date of the injury, who had suffered from fractures of the proximal femur were included in this study. Those who had suffered more than one fracture were excluded.

Focusing on long-term outcome and quality-of-life after-treatment, patients in the study had to have been living alone before the injury without need for nursing help; they all had to pass a four-week stay in a rehabilitation unit (or longer), and had to be able to answer the questionnaires. To exclude demented patients, a minimal mental state screening test was applied.

In the study were patients who had been dismissed from the rehabilitation unit between January 1997 and December 1998, with an interval between operation and investigation of at least six months. Of the patients selected for the investigation, only 4% were able to attend; 96% had to be visited in their homes where the investigation was performed.

The study consisted of a clinical investigation and the review of radiographies. For evaluation purposes, the hip-scores of Harris[14], Iselin[15] and Charnley[16] were applied. Quality-of-life as an outcome measure was evaluated by generic Quality-of-Life questionnaires as the Spitzer Index and a visual