Appendix

Clinical and Radiographic Evaluation

Consistent positioning of the patient was ensured with the use of a frame that was placed at the end of a standard x-ray table. The patient’s feet were secured to polypropylene orthoses attached to the frame, which could be adjusted to accommodate patients of different height. Cross-table lateral radiographs of each hip were also made.

Stem subsidence was evaluated by measuring the distance between the tip of the greater trochanter and the upper margin of the lateral shoulder of the stem, as well as the distance between the most proximal-medial part of the porous-coated surface of the stem and the upper border of the lesser trochanter. These values, which were measured in the anteroposterior radiographs made two weeks after the operation, were compared with those in the anteroposterior radiographs made at the final follow-up examination to define the amount of subsidence. A femoral component was considered to be possibly loose when there was a complete radiolucent line surrounding the entire porous-coated surface on both the anteroposterior and the lateral radiographs. Bone ingrowth into the femoral component was considered to have occurred when there was direct contact of the trabecular bone of the femur and the femoral component. A vertical change in the position of the acetabular component was measured between its inferior margin and the inferior margin of the ipsilateral teardrop, and a horizontal change was measured between the Köhler line and the center of the outer shell of the acetabular component.