Figs. E-1A and E-1B A sixty-seven-year-old woman who had metal-on-metal resurfacing for osteoarthritis of the left hip. Fig. E-1A Anteroposterior radiograph of the left hip made six months postoperatively. The femoral component is small, and socket abduction is 51° with excessive anteversion of 35°.
Fig. E-1B Radiograph made 11.5 years after surgery, showing a radiolucent zone in the proximal part of the femoral neck, adjacent to the superior aspect of the metaphyseal stem. The lesion was observed at fifty-two months and had slowly progressed.
Figs. E-2A, E-2B, and E-2C A forty-year-old man who had metal-on-metal resurfacing bilaterally for osteoarthritis secondary to osteonecrosis in both femoral heads. Fig. E-2A Radiograph made immediately postoperatively.

Fig. E-2B Radiograph made two years postoperatively showing substantial narrowing of both femoral necks (23.5% on the left and 19% on the right). There is thickening of the medial neck cortex in the right hip and an impingement divot on the superior surface of the left femoral neck. (The lateral abduction angle of the cup is 40°.)
Fig. E-2C Ten years after surgery, the narrowing appears to have stabilized and the patient remained asymptomatic. Slight progression of femoral neck thinning can be seen on the left hip (27.1%), while the right hip remained the same.