Transient osteoporosis of the hip in pregnancy complicated by femoral neck fracture

A case report

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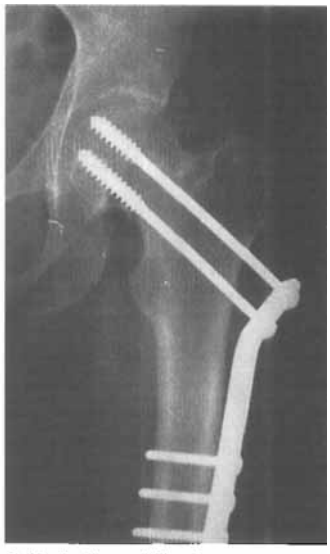
A 35-year-old woman developed hip pain 10 weeks before delivery. She reported no trauma. A physician ordered bed rest and reduced weight bearing. A radiograph 2 weeks after the uncomplicated delivery revealed a displaced subcapital femoral neck fracture and the patient was admitted to our hospital in good health. Quantitative computed tomography densitometry of the L2 and L3 vertebrae showed moderate-to-severe osteopenia. Scintigraphy showed increased activity in the left femoral head and neck.

Compression osteosynthesis with Zespol screws and plate (Baildon, Poland) was performed 7 weeks after delivery. The postoperative course was uncomplicated. 4 months after surgery, the patient walked with 1 crutch and had no pain. 3 months later, the osteosynthesis set was removed. At latest follow-up 2 years after the operation, the patient had no pain and normal hip motion. Radiographs showed a healed fracture in the anatomic position and normal bony structure of the femoral head.



B. Reduction and fixation.

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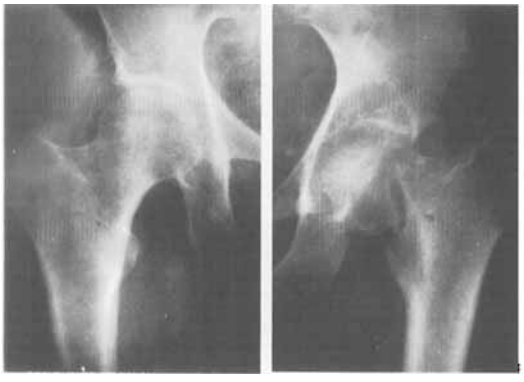
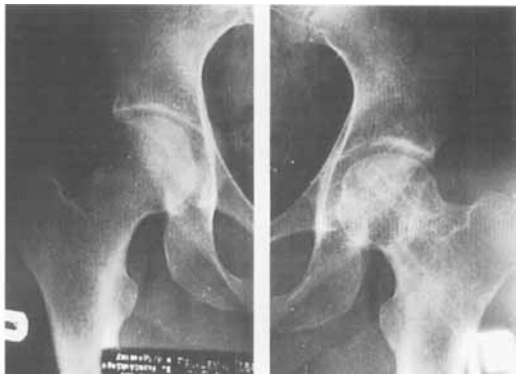


A. 2 weeks after delivery. A subcapital fracture of the left femoral neck in a 35-year-old woman. Osteopenia in both hips.



C. 2 years after osteosynthesis. Note anatomic position and normal bony structure in both hips.

Discussion

The literature on transient osteoporosis of the hip in pregnancy comprises some 30 cases with fracture, but the real number is probably much higher (Gouin et al. 1992). Physicians and women often neglect the hip pain and fear of using radiography in pregnancy may explain why the diagnosis is delayed (Shifrin et al. 1987, Brodell et al. 1989). The osteoporosis has its peak around the time of delivery and diminishes thereafter. Bone mineral content returns to normal values after several months (Ippolito et al. 1986).

Gouin et al. (1992), Brodell et al. (1989) and Shifrin et al. (1987) described fractures of the femoral neck in patients only a few days before delivery. In such cases, the osteosynthesis should be postponed until post-partum. We think that surgical treatment in the earlier part of the last trimester should also be postponed, because of the risk inevitably linked with an anesthetic and operative measures.

References

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