

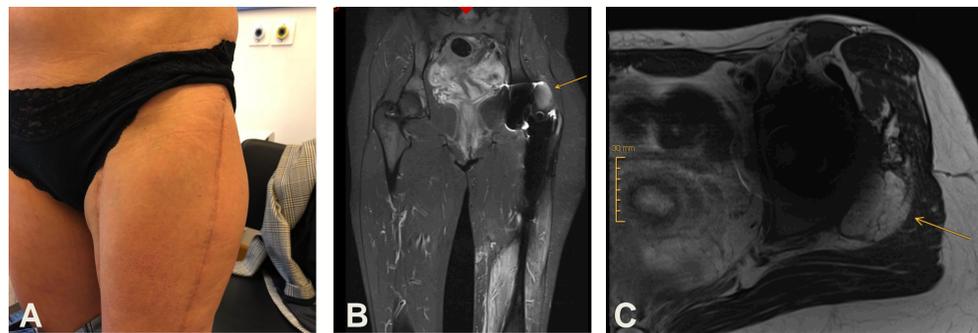
EXTRA-ARTICULAR PAO RESECTION EN-BLOC WITH THE PROXIMAL FEMUR AND RECONSTRUCTION WITH A PELVIS TUMOR-PROSTHESIS

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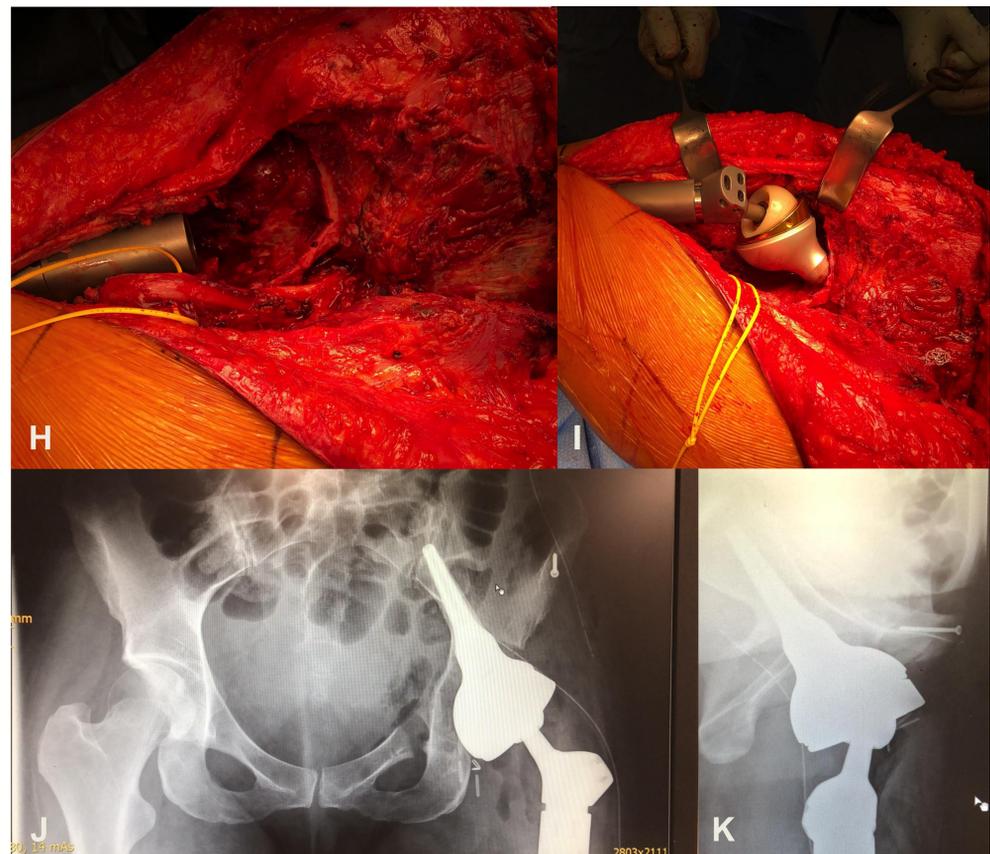
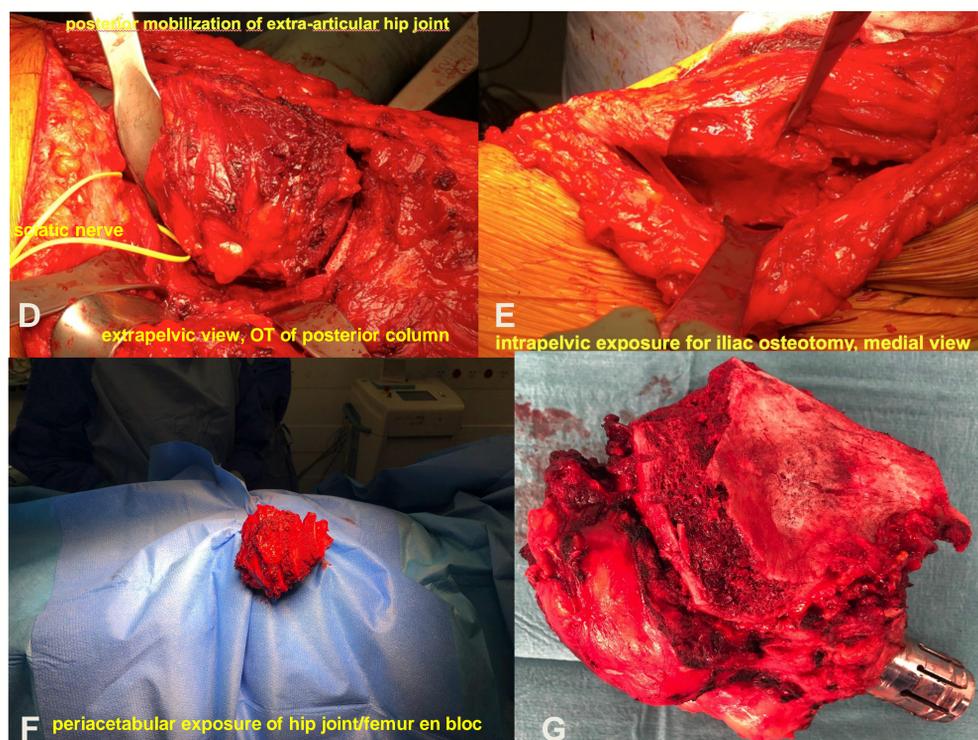
INTRODUCTION

Periacetabular resection (PAO) is meanwhile an established surgical method to correct the version of hip congruency. When a small intra-articular malignant bone sarcoma is diagnosed, a PAO may be performed to resect the hip joint extra-articularly. To the best of our knowledge, an extra-articular hip joint resection together with the proximal femur has not been reported to date.



PATIENT & METHODS

A 29 year-old chemist was diagnosed with synovial chondromatosis of the left proximal femur (15x10x10cm), and an initial resection through an antero-medial approach was performed. 20 months later, a second resection was performed for a 5cm local recurrence, as well as 44 months post initial surgery, with the same tumor extent as initially. All pathological work-ups confirmed the benign nature of the initially diagnosis. 71 months after, a third local recurrence was noticed, a biopsy from the lesser trochanter again did not reveal any signs of malignancy. However, because the lesser trochanter was clearly eroded by the tumor on imaging, we elected to transarticularly resect the proximal femur together with the vessels, which were also replaced. At this step, we unexpectedly noticed that there were intraarticular tumor remnants squeezed between the articular surfaces. Postoperative rehabilitation was uneventful with full functional recovery without limp. 103 months after the index surgery, a fourth local recurrence was noticed intra-articularly. No metastasis were ever noted (A-C).



RESULTS

We elected to join the lateral incision with an iliac, dorsally diverted incision to expose the lateral aspect of the pelvis. Medius and minimus were kept on the tumor, and the dorsal column exposed while protecting the sciatic nerve in its entire course (D-I). With intrapelvic protection, the PAO osteotomy from outside. The lateral femur, specifically the periprosthetic membrane of the proximal femur prosthesis was exposed to then complete the PAO such that the femur could be luxated in one piece with the extra-articular hip-joint outside the pelvis. After new draping, the prosthesis was disassembled and the tumor removed completely. A modular pelvic LUMIC prosthesis was inserted and assembled with the proximal femur, with reconstruction of the soft tissues (J-K). Postoperative course was uneventful without any signs of infection, and the patient was ambulatory 6 months post surgery with crutches.

CONCLUSION

Synovial chondromatosis may transform into chondrosarcoma, and a high level of suspicion is mandatory to think of it. Extra-articular resection of the hip joint together with the proximal femur in en-bloc is technically possible.

HIGHLIGHTS:

Repeated recurrences of synovial chondrosarcoma makes one think of chondrosarcoma transformation. Extra-articular PAO resection can nicely be reconstructed with a pedestal pelvis cup.