HIP TUBERCULOSIS IN A IMMUNOSUPPRESSED PATIENT

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Background: In hematopoietic stem cell transplant (HSCT) recipients, hip tuberculosis on top of femoral head aseptic necrosis is infrequent and the mortality is high.

Case report: We present a case of hip joint tuberculosis in a 57-year-old man with acute myelomonocytic leukemia (M4) who underwent allogeneic HSCT. Five months post-transplantation the patient developed extensive chronic graft versus host disease (cGVHD) treated with cyclosporine and corticosteroids. Eight months post-transplantation because of low-grade fever, elevated ESR and abnormal chest CT scan findings, empirical anti-TB treatment started. Three weeks later anti-TB treatment was stopped because of hepatic enzyme elevation. One year post transplantation, he complained for bilateral hip pain. MRI revealed bilateral femoral head aseptic necrosis. One year later, the right femoral head collapsed and suddenly rapid hip joint destruction occurred. He was planned to have total right hip arthroplasty. During the operation an abscess was evacuated. Necrotic tissues and bone were removed and suction drainage was applied. Ziehl-Neelsen stain revealed acid-fast bacilli. Diagnosis of tuberculosis was confirmed by biopsy, PCR and cultures. A *Mycobacterium tuberculosis* strain, sensitive to all first line anti-TB drugs, was isolated in BACTEC MGIT 960 culture system and on Löwenstein-Jensen medium. After one year of anti-TB treatment, synovial fluid samples were negative for tuberculosis. The patient was submitted to cementless total left hip replacement and three months later to total hybrid right hip arthroplasty. One year post-operatively the patient is asymptomatic and able to walk.

Conclusion: In HSCT recipients tuberculosis should be considered in the differential diagnosis when rapid joint destruction occurs. Early diagnosis improves response to surgery and to anti-TB therapy.