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UNCOMMON HIP PROSTHESIS DISLOCATION INTO THE BLADDER

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Iatrogenic urinary tract injuries appear as a result of gynaecological, urological, surgical and orthopaedic procedures. The bladder is the most frequently damaged urinary system structure during operations. Haematuria and urination disorders is the most common clinical presentation. Cases of perioperative urological complications after total hip arthroplasty (THA) can be found in the literature, even so failure of the operation with central migration of the prosthesis is rare. This seems to be the first case of hip prosthesis dislocation perforating urinary bladder and iliac arteries four years after successful THA.

A female, 75 years old, with a history of total hip replacement in 2010 and revision THA in 2014 was admitted to the ward due to haematuria, walking difficulties, hip pain and general malaise which started four days earlier. Laboratory findings indicated severe anaemia. A large hyperechogenic foreign body with acoustic shadow was observed in the bladder in ultrasound. X-ray of the abdomen and pelvis revealed dislocated acetabular cup of the right hip prosthesis and femoral stem perforating the bladder. Urethrocytography did not show any contrast extravasation. Nevertheless, bladder injury was established in cystoscopy. Additionally, CT angiography confirmed right iliac artery injury. An emergency operation had to be performed due to quickly deteriorating condition of the patient. At first, bleeding from right common iliac artery and right external iliac artery was staunches. Next, acetabular component as well as implant stem were removed without replacement. Bladder rupture was closed. The injured fragment of external iliac artery was replaced with 8mm Gelsoft vascular graft. Surgical drains were placed in the abdomen and along the artery. Postoperatively the woman was admitted to the ICU. After twenty three days of hospitalization the patient was discharged.

Iatrogenic bladder injury can have an unpredictable genesis and may be life-threatening. What is more, diagnostic tests may provide confounding results, therefore exercising extreme caution is crucial. Multiple hip surgeries pose greater risk of hip prosthesis dislocation. An early diagnosis and multidisciplinary cooperation of specialists are critical for effective treatment.