



Endourology

Endoscopic Management of Free Lying Migratory Orthopedic Screw in Bladder

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ABSTRACT

75-year old gentleman presented with acute urinary retention. He had met with road traffic accident 15 years back and sustained pelvic fracture and bladder rupture, underwent bladder repair and open reduction and internal fixation of pubic symphysis. Imaging studies showed the free lying encrusted orthopedic screw in the bladder, which was removed per urethra using nephroscope. Migratory foreign bodies in the urinary bladder are rare. However there is a possibility of longstanding foreign bodies in adjacent structures to erode and perforate into the bladder. Inside the bladder these foreign bodies act as nidus for stone formation.

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Introduction

Foreign bodies (FB) in urinary bladder can occur due to self introduction or migration. Intra-uterine contraceptive devices are the commonly reported free lying foreign body found in the bladder. Disruptions of the pelvic ring are associated with a 7% to 25% incidence of lower urinary tract injuries. Displaced fractures and dislocations of the pelvic ring and acetabulum are usually treated with open reduction and internal fixation with plate and screws. Loosening and migration of these plates and screws can occur. However to the best of our knowledge, this is the first report describing the migration of such a screw into the bladder and the implant staying in the bladder without spontaneous extrusion and removal using a nephroscope through the urethra.

Case presentation

75 year gentleman presented in September 2015, with frequency for 2 days followed by acute urinary retention (AUR). He had sustained a road traffic accident (RTA) in Oct 2000 and had pubic diastasis and bladder rupture. Bladder repair followed by open reduction and internal fixation of symphysis pubis were done with a single plate and four screws. Post operative period was un-eventful. In 2002 implant removal was attempted by the orthopedician but was unsuccessful. He was lost to follow-up till he returned with acute urinary retention in September 2015.

Management

Evaluation with ultrasound abdomen and CT scan pelvis (Fig. 1) revealed a mobile screw lying in the bladder with minimal



Figure 1. Computed tomography showing intravesical screw.

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