Spontaneous rupture of bladder in puerperium

Julius Wandabwa, Tom Otim, Paul Kiondo

Department of Obstetrics and Gynaecology, Makerere University, Faculty of Medicine and Mulago Hospital

Abstract
Spontaneous rupture of bladder and extravasation of urine in the peritoneum without evidence of trauma is rare. This condition is an emergency. It presents in a unique way therefore, the diagnosis and treatment is usually delayed. This patient presented with an acute abdominal pain and oliguria. She had delivered normally eight days before re-admission. Investigations were done and an exploratory laparotomy was performed. There was a tear in the fundus of the bladder and the peritoneal cavity contained urine. Peritoneal lavage was done and the bladder was repaired in layers. The bladder was catheterised and drained only 100 mls of urine which was turbid.

It showed a bulky uterus, the bladder with little urine in it and free fluid in the peritoneal cavity. A diagnosis of peritonitis was made. The patient was started on antibiotics and prepared for laparotomy. The bladder was catheterised and drained only 100 mls of urine which was turbid.

At laparotomy, the abdominal cavity contained one litre of urine, which was purulent. The uterus was 14 week’s in size and there was no evidence of perforation. The omentum was adherent to the bladder. The omentum was separated from the bladder. This revealed a tear in the fundus of bladder, which was seven centimetres long. The edges of the bladder were thickened and necrotic but the bladder wall was normal. The edges were refreshed and the bladder was repaired in two layers. A flap of omentum was grafted on the repaired site. A corrugated drain was left in abdomen. Continuous bladder drainage was instituted using urethral catheter for three weeks and bladder training was done. Bladder function returned to normal after four weeks. Cystoscopy was done four weeks later and the bladder was found to have healed. Histology report revealed necrotising cystitis.

DISCUSSION
Spontaneous bladder rupture is usually described in association with recent trauma, malignant diseases, anatomical outflow obstructions, indwelling catheters, instrumentation, neurogenic bladder or a combination of...
Rupture of bladder in puerperium without predisposing factors is a post partum emergency. The usual presentation in spontaneous bladder rupture is that of an acute abdomen. Urine may continue to drain after bladder catheterisation and the injury if unsuspected may go undiagnosed for period ranging from days to weeks. This condition is associated with oliguria, anuria, vague abdominal pain and biochemical changes suggestive of renal failure

Difficulties in passing urine in post partum period does occur but history of oliguria or anuria and vague abdominal pain and an onset of ascites are associated with bladder rupture. The main cause of bladder rupture in this patient was not established. Diagnosis depends on retrograde cystoscopy, analysis of ascitic fluid for urea and creatinine and blood biochemistry suggestive of renal failure and exploratory laparatomy In developing countries where laboratory facilities are not easily accessible, a high degree of suspicion and exploratory laparotomy still remains mainstay of diagnosis.

Operative treatment included removal of urine from the peritoneal cavity, closing the rupture and instituting good vesicle drainage. Early diagnosis and prompt surgical treatment decreases the morbidity and mortality associated with this condition.

REFERENCES