

Spontaneous Rupture Of Urinary Bladder (SRUB); a case series



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INTRODUCTION

Spontaneous rupture of urinary bladder (SRUB) is an uncommon and life threatening event.. It is rare, making up less than 1% of all bladder injuries and has mortality rate approaching 50%. We would like to report 3 atypical cases of SRUB.

PATIENT 1

Mr A is a 78 years old malay gentleman, chronic smoker presented with sudden onset abdominal pain, distension and chronic gross hematuria. CT abdomen pelvis shows perforation at bladder dome . Emergency bladder repair without suprapubic cystostomy (spc) was done in periphery hospital but complicated with bladder leak post-op. Relaparotomy and repair was done in our centre but despite that patient passed away due to septic shock with multiorgan failure. Hpe of bladder wall edges was reported back as transitional cell carcinoma.

PATIENT 2

Mr M is a 65 years old malay gentleman, history of cva with neurogenic bladder on cbd presented with urinary retention with hematuria and clots. Bladder irrigation was unsuccessful as there were multiple episodes of block with blood clots. CT done and shows bladder perforation. Blood parameters shows acute renal failure with metabolic acidosis. He under went exploratory laparotomy and bladder repair. Post-operatively patient succumbed due to sepsis secondary hospital acquired pneumonia. Hpe of bladder wall edges revealed as fungal infection.

PATIENT 3

MR L is a 50 years old guy presented with unilateral body weakness secondary to haemorrhagic stroke. In ward, patient developed acute urinary retention secondary to neurogenic bladder. Bladder catheterization was done and noted frank hematuria with clots. In view of persistent block, ultrasound done and noted free fluid in the pelvis and was suspected to have perforated bladder. Emergency bladder repair was done. Post-op was uneventful.



Figure 1: Ct scan if Patient 1 shows thickened bladder wall with bladder mass and contrast leak intraperitoneal



Figure 2: Bladder rupture at dome in Patient 1



Figure 3: In patient 3, both spc and cbd was removed after day 14 cystography shows good bladder healing and no contrast extravasation.

LEARNING POINTS

Sisk and Wear in 1929 first coined the term SRUB. They defined the condition as: "If the bladder ruptures without external stimulation, it is spontaneous and deserves to be reported as such". Bastable JR *et al.* have reported an overall incidence of 1:126000 .The general surgeon is more likely than the urologist to encounter such patients in the first instance. Therefore, there should be a high index of suspicion in patients presenting an acute abdomen with inability to void, anuria or oligouria, hematuria and elevated serum creatinine levels.

CT cystogram is the gold standard for the diagnosis of bladder rupture. This is the most accurate radiological study to identify bladder rupture. When bladder filling and post void images are obtained, cystography has an accuracy rate of 85-100%.

Intraperitoneal bladder injury should always be managed with surgical repair because urine extravasation can cause peritonitis, intrabdominal sepsis and death. A bladder biopsy, to exclude other pathology, is also recommended.

CONCLUSION

The diagnosis of SRUB is a rare urological emergency. Prompt diagnosis followed by surgical intervention is the key for successful outcome.

REFERENCES

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