Case Report

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Idiopathic Spontaneous Intraperitoneal Rupture of Bladder

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Abstract

Introduction: Intraperitoneal rupture of the bladder is considered rare(20%) as compared to extraperitoneal [1]. Idi-opathic rupture of urinary bladder is even rare (1%) [2]. The causes of spontaneous bladder rupture are ill defined and may vary from chronic alcoholism to bladder over distension and trivial trauma such as minor falls. *Case Report:* A 62 year old male patient presented to our emergency department with complaints of constipation and absent urine output for last one day. He had no known comorbidities. On examination he had normal vitals with no hypotension. The abdomen was distended, tense, non tender with absent bowel sounds. He was drowsy but arousable with no other neurological deficits. The USG screening in ED showed massive amount of free fluid in Morrison's pouch. ABG and Chest X Ray were normal. NCCT Abdomen showed moderate to gross free fluid in peritoneal cavity with intraperitoneal rupture of bladder in the dome. He was urgently taken up for exploratory laparotomy which confirmed the CT findings. *Conclusion:* This case illustrates a very rare incidence of intraperitoneal urinary bladder rupture with no apparent cause.

Keywords: Intraperitoneal Bladder Rupture; Unidentifiable Cause.

Introduction

Intraperitoneal rupture of the bladder is considered rare (20%) as compared to extraperitoneal [3]. Idi-opathic rupture of urinary bladder is even rare (1%) [4]. The causes of spontaneous bladder rupture are ill defined and may vary from chronic alcoholism to bladder over distension and trivial trauma such as minor falls.

Case Report

A 62 year old male patient presented to our emergency department with complaints of constipation and absent urine output for last one day. He had no known comorbidities. There was a history of binge alcoholism for the previous 2 days. On examination he had Heart rate-84/min, BP- 130/80 mm, SPO2-98% on Room Air, Temp-98.6 F, Blood Glucose- 109 mg/dl, RR- 16/min. Systemic Examination revealed a patent airway, B/L air entry with no additional breath sounds, normal heart sounds. The abdomen was distended, tense, non tender with absent bowel sounds. He was drowsy but arousable with no other neurological deficits. The USG screening in ED showed massive amount of free fluid in Morrison's pouch but the Urinary Bladder was not clearly identified. A venous Blood Gas was ordered which showed: pH- 7.31, pCO2- 42 mm, HCO3- 20 mg/dl, Na- 136, K- 3.4, Cl- 102, Hb- 10.6. A Ryle's Tube and a Foley's Catheter were put in, but no Gastric secretions could be aspirated, and no urine output was visible in the Urobag. An Erect Abdomen X Ray was obtained which again showed no significant abnormality including no Free Air, No Signs of intestinal Obstruction. An NCCT Abdomen was

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ordered which showed moderate to gross free fluid in peritoneal cavity with intraperitoneal rupture of bladder in the dome. He was urgently taken up for exploratory laparotomy which showed presence of intraperitoneal fluid (urine) and momentum stuck over the bladder. On removal of omentum, large rent in the intraperitoneal surface of the bladder was noted. Subsequently, laproscopic repair of the marines was done and the rent was closed with 2-0 Vicryl in 2 layers & a large bore triple lumen catheter was placed. The peritoneal cavity was washed with Normal Saline and intra peritoneal drain was also placed in the Pelvis. The post op recovery period of the patient was uneventful, and the patient was discharged without any complications after 4 days.

Discussion

This case depicts a rare incidence of Spontaneous Intraperitoneal Rupture of Urinary Bladder. The most plausible cause for the bladder rupture could be the recent bout of alcoholism, which would have led to bladder overditension with reduced sensitivity due to alcohol induced stupor, with perforation of the bladder following even minor strains like coughing which raise intra abdominal pressure [5].

Conclusion

Idiopathic Spontaneous Rupture of urinary bladder is a rarely reported clinical entity, and is a surgical emergency. The causes are not yet clear, and may vary from alcoholism, Diabetic Neuropathy, Malnutrition to post operative weakness of abdominal musculature. A strong clinical suspicion is needed to diagnose this when presented with a history of anuria/oliguria, with abdominal distension, and deranged Renal Function. CT Scan with or without Contrast is the dignostic test of choice. An emergency Surgical consult, coupled with resuscitation to minimise the prevalent acidosis/ Dyselec-trolytemia should be undertaken whenever the diagnosis is confirmed.

Conflict of Interest: None

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End Note

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