

Spontaneous Bladder Rupture following Normal Vaginal delivery presenting without haematuria/anuria : A rare case report

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Background

- Spontaneous rupture of bladder is a rare complication after vaginal delivery commonly manifesting as anuria, urinary ascites, abdominal distension.
- We present a case of intra abdominal bladder with acute abdomen, urinary ascites with no anuria, posing a diagnostic challenge.

Case History

- 33 y old , P2L2, Post natal Day 6.
- Presented to emergency with acute abdomen, vomiting, distension of abdomen for 1 day with increased frequency of micturition.
- Reported straining to pass urine 1 day.
- O/E – tense per abdomen, umbilicus flattened, no organomegaly, free fluid + (fig 1).

Investigations and Diagnosis

- CRP -119mg/L , WCC 12,900/cu mm
- USG Abdomen – Mild Ascites, bladder distended.
- Ascitic fluid – proteins (0.6 mg%), increased creatinine (13.83 mg/dL)
- CT Abdomen – gross ascites with b/l mild pleural effusion.

Management & Outcome

- Emergency Laparotomy.
 - 3L clear fluid straw coloured (intraperitoneal, fig 2)
 - 1x1 cms rent in posterior bladder wall, edematous peritoneum and bladder wall (fig 3)
 - Rent repair performed, confirmed by blue dye test (fig 4)
 - Wound closed in layers with a drain (fig5).
- Treated with IV Meropenem, dosage adjusted with regular trough levels.
- Repeat imaging – negative for ascites
- Discharged home, Foleys removed after 3 weeks



Figure 1

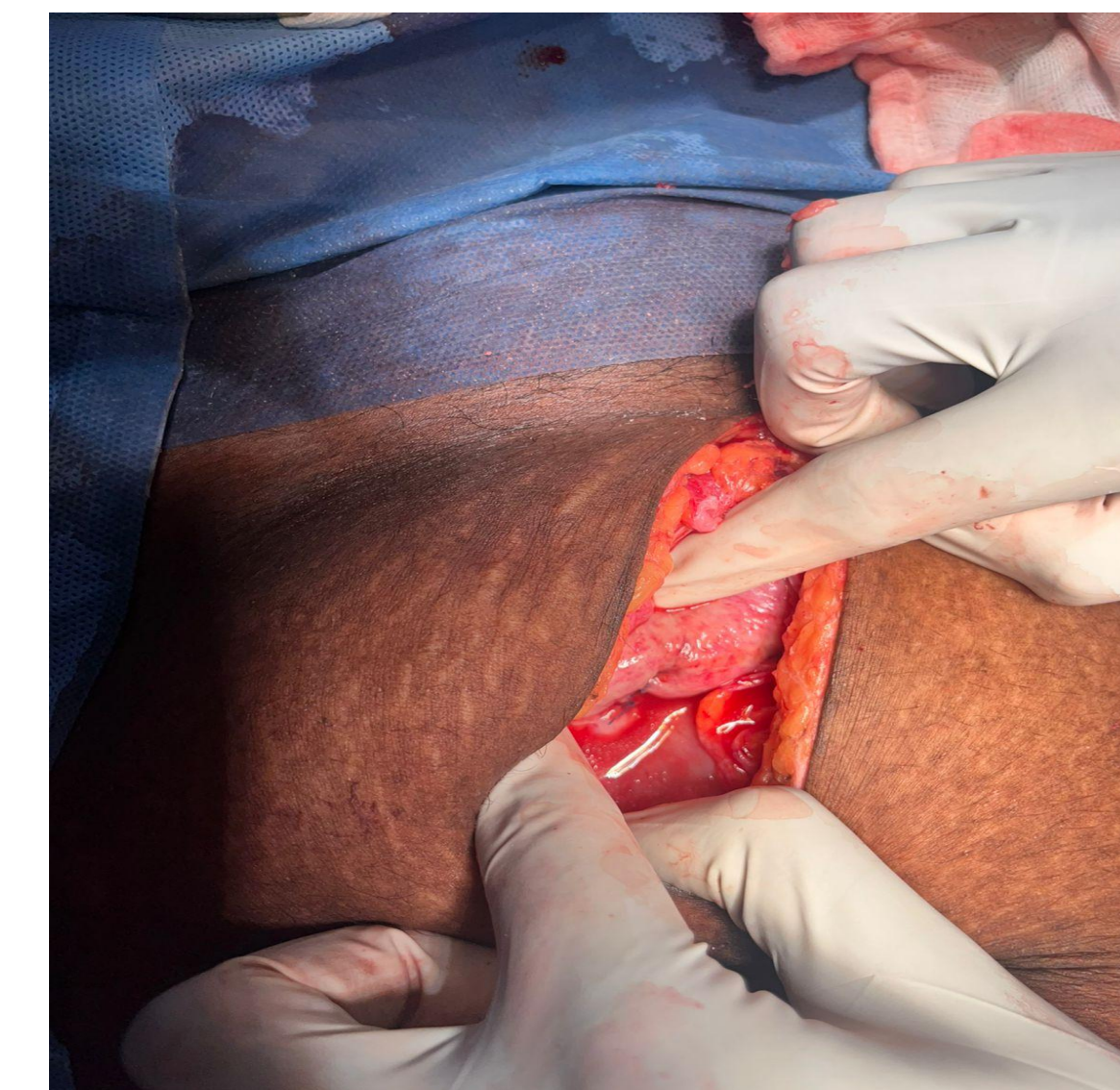


Figure 2



Figure 3

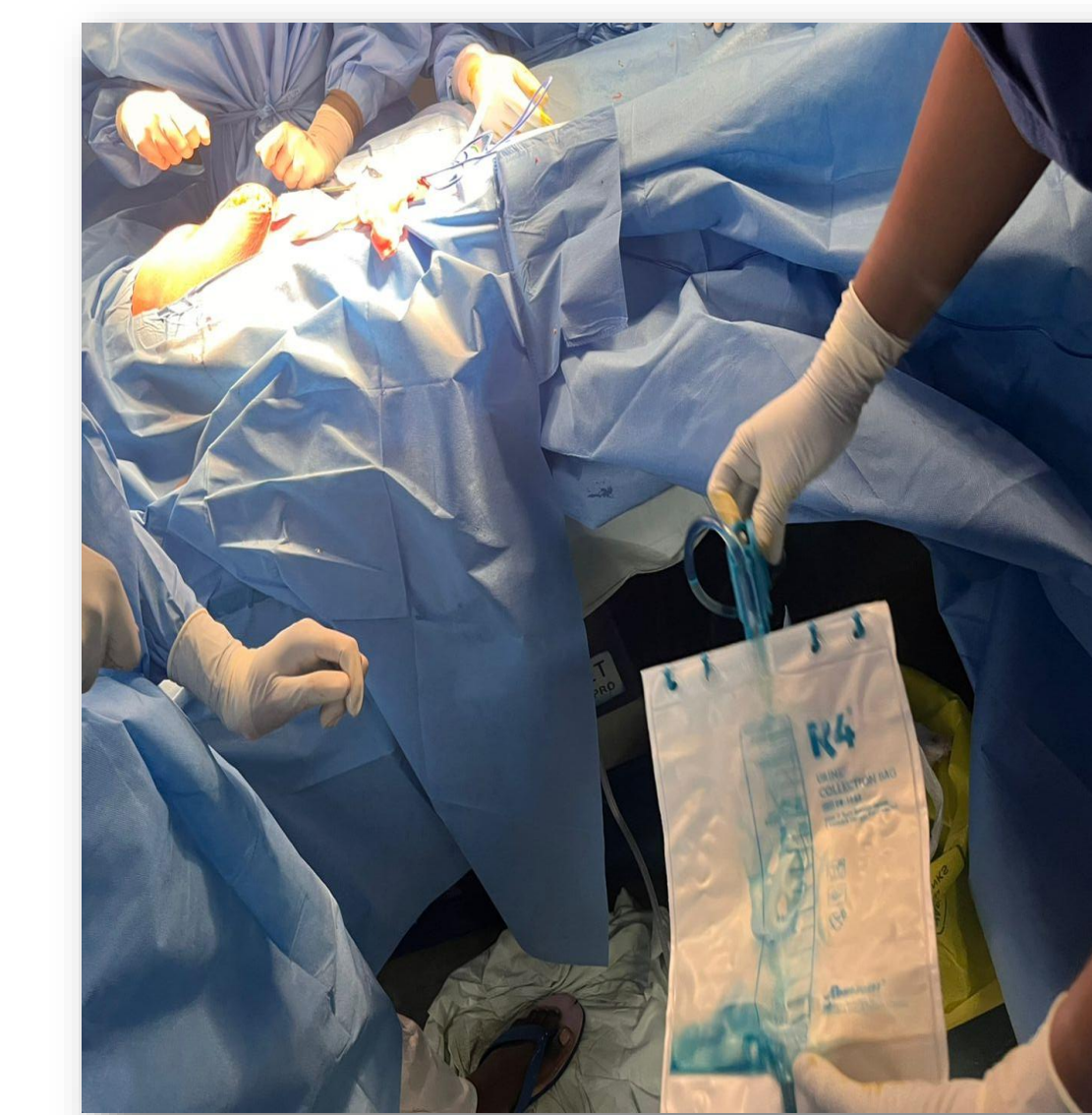


Figure 4



Figure 5

Discussion & Conclusion

- Spontaneous rupture of the urinary bladder - the bladder ruptures spontaneously without external stimulation (Sisk and Wear)
- Distension of bladder is the usual cause.
- Main strain of distention is exerted on the posterior-superior peritonized surface of bladder
- History of difficulty to pass urine, straining, increased frequency of small urine volumes and high ascitic fluid creatinine prompted us for an emergency laparotomy when no radiological imaging detected bladder rent.
- Urinary retention and over distension can cause.
- Important to observe the urinary output in postpartum period and encourage adequate bladder emptying.

References

1. Shah et al, Spontaneous Bladder Rupture in Puerperium following Instrumental Vaginal Delivery, Journal of South Asian Federation of Obstetrics and Gynaecology, January-March 2018;10(1):69-71
2. Muntaha et al, (2023) Spontaneous Rupture of the Bladder in Postpartum Phase: A Catastrophic Life-Threatening Event. Med J Obstet Gynecol 11(4): 1180