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A rare case of live-term vaginal birth in a patient with unrepaired congenital ectopia vesicae and split pelvis

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Abstract
Background: Congenital ectopia vesicae is a rare urological anomaly often accompanied by pelvic skeletal deformities, typically requiring cesarean delivery due to obstetric risks.
Case Presentation: A 19-year-old primigravida with unrepaired congenital bladder exstrophy and split pelvis presented in active labor. Despite her anatomical anomalies, she achieved an uncomplicated full-term vaginal delivery. Ultrasound confirmed ectopia vesicae with split pelvis and absent umbilicus. Other investigations, including CBC, LFT/KFT, and HbA1c, showed only mild abnormalities. Conservative management with close monitoring, iron and vitamin supplementation, prophylactic antibiotics, and analgesia was provided.
Conclusion: This case challenges the presumption of cesarean delivery as obligatory in patients with ectopia vesicae and underscores the role of individualized care.

Keywords: Ectopia vesicae, bladder exstrophy, vaginal delivery, congenital anomaly, split pelvis, obstetric management

Introduction
Ectopia vesicae, or bladder exstrophy, is a rare congenital anomaly affecting the lower abdominal wall, pelvis, and urogenital structures [1]. The first description of exstrophy bladder dates back to 2000 BC [2]. The condition is usually diagnosed and surgically managed in infancy. Pregnancies in women with untreated bladder exstrophy are extremely rare, often complicated, and typically delivered via cesarean section. Here, we present an unusual case of spontaneous vaginal delivery in a patient with unrepaired ectopia vesicae and split pelvis. It affects 1:10,000-50,000 live births [3,4] and frequent in male with with a male-to-female ratio of ~3:1[5]. Most cases are sporadic.

Case Presentation
A 19-year-old primigravida presented in active phase of labor at term gestation with a untreated congenital bladder exstrophy. The patient was asymptomatic throughout her life and pregnancy. At the time of admission, she was having a Bishop score of 11. After concern and councelling to the patient and family, the patient was given trial of labour with surgical team on standby. This anatomical defect predisposes to dystocia, maternal trauma, and bladder mucosa injury, in pregnancy and during labor, the exposed bladder mucosa and altered anatomy complicate vaginal delivery; hence, caesarean section is preffered.
She delivered vaginally with any anticipated intrapartum and postpartum complication likely post partum haemorrhage, bleeding from urogenital region, bladder injury/prolapse and pelvic organ prolapse. The baby was also healthy.
Postpartum Physical examination of her urogenital system revealed that the patient presents with a midline congenital defect of the lower anterior abdominal wall and bladder, with the posterior bladder wall everted and exposed as a pink, lobulated, mucosa-like mass above the vulva, extending from a large suprapubic defect. The urethra is displaced anteriorly, and the external genitalia are malformed, including a bifid clitoris, abnormal labia, an anteriorly displaced vagina with altered vaginal axis, and a widened vulval cleft. Vaginal and urethral openings are located inferior to the exposed bladder plate. The pubic symphysis is widely separated (diastasis), and the anal opening is placed anteriorly but functions normally. Despite these anomalies, the patient demonstrates intact urinary and fecal continence.

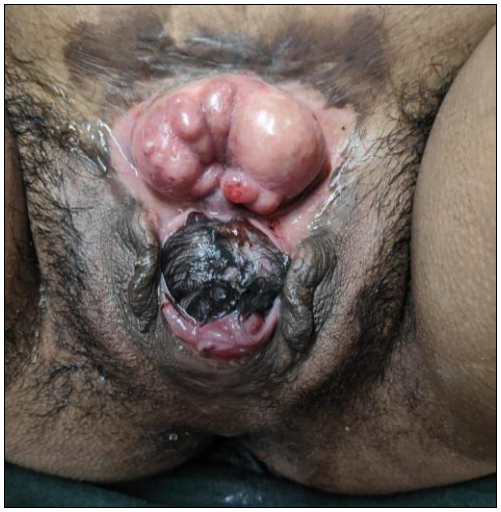
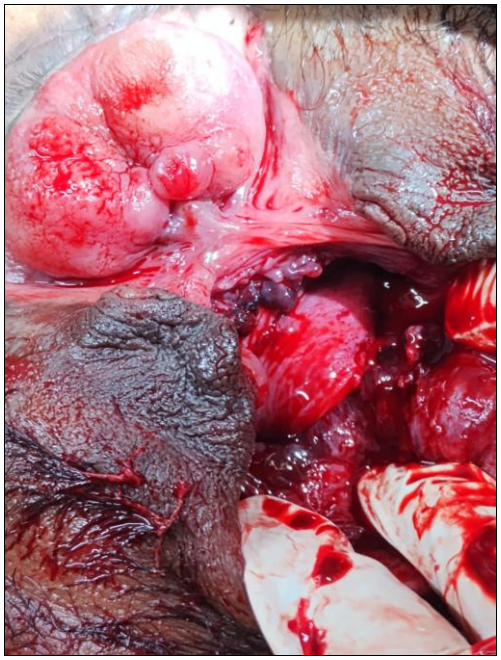


Fig 1: During Crowning



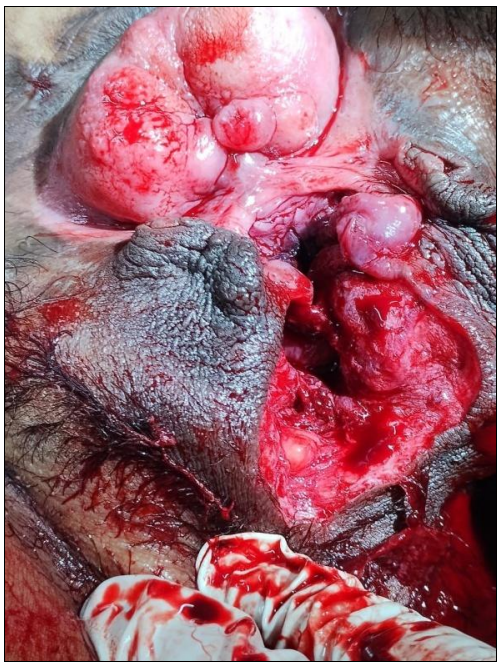


Fig 2: Intrapartum images

Fig 3: Postpartum image

Investigations and findings: Postnatal ultrasound imaging confirmed ectopia vesicae with bilateral mild hydroureteronephrosis and extension of the bladder defect into the urethra. Liver and kidney function tests revealed mild abnormalities that did not require intervention. Complete blood count showed mild anemia, which was managed with iron supplementation. HbA1c was within the normal range, effectively ruling out gestational diabetes.

Medical Management: The patient was managed with iron and vitamin C supplementation to address anemia and support general maternal health. Prophylactic antibiotics were administered to prevent infection of the exposed bladder mucosa, and analgesics were provided for symptomatic relief.

Monitoring: The patient was closely monitored with frequent maternal vital sign checks, observing for any signs of abnormal bleeding or bladder/pelvic organ prolapse. Neonatal evaluation was also conducted to screen for any congenital abnormalities.

Discussion

Bladder exstrophy affects about 1 in 30,000 to 50,000 live births and typically presents with a range of urogenital abnormalities. Pregnancy in these patients is rare, and untreated cases pose additional challenges. Reported outcomes frequently involve cesarean sections due to risks like pelvic instability, bladder trauma, and obstructed labor.

This case is exceptional because the patient had no prior surgical correction, yet experienced a spontaneous full-term vaginal delivery without any urological or obstetric complications, and required no interventions. It underscores that, with individualized care, careful monitoring, and expert management, safe vaginal delivery is possible in select cases, challenging the conventional reliance on cesarean delivery.

Conclusion

Bladder exstrophy is a challenging disease that is accompanied with other morbidities. Women with BE still have an impaired fertility due to previous surgeries and concomitant diseases, and pregnancy is high risk for both mother and baby. Balancing the pros and cones of the medical decision in order to achieve the best outcomes for both mother and child is crucial as choosing the right decision depends, to a great extent, on the presentation and the past history of the patient not only the existence of the bladder exstrophy. This report highlights the rare possibility of successful vaginal delivery in a patient with congenital ectopia vesicae and a split pelvis. Careful clinical assessment, individualized obstetric management, and vigilant expectant care were key in achieving a safe outcome for both mother and child.

This case adds to the clinical literature, enhancing awareness of potential obstetric options in patients with uncommon congenital urological anomalies.

Conflict of Interest
Not available.

Financial Support
Not available.

References

1. Ludwig M, Ching B, Reutter H, Boyadjiev SA. Bladder exstrophy-epispadias complex. Birth Defects Res A Clin Mol Teratol. 2009 Jun;85(6):509-22.
2. Buyukunal CS, Gearhart JP. A short history of bladder exstrophy. Semin Pediatr Surg. 2011 May;20(2):62-5.
3. Ben-Chaim J, Docimo S, Jeffs R, Gearhart J. Bladder exstrophy from childhood into adult life. J R Soc Med. 1996;89(1):39P-46P. DOI:10.1177/014107689608900112.
4. Fotter R. Pediatric uroradiology. Berlin: Springer; 2008. ISBN: 9783540330042.
5. Entezami M, Knoll U, Albig M, *et al*. Ultrasound diagnosis of fetal anomalies. Stuttgart: Thieme; 2004. ISBN: 9781588902122.

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