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Answers to Medical Quiz

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A1. Exposed open urinary bladder attached to the border of the anterior abdominal wall defect.

A2. Cover the exposed open urinary bladder by wet sterile gauze and transfer the baby to a tertiary hospital where neonatal intensive care unit and pediatric surgeon are available.

A3. Bladder exstrophy.

DISCUSSION

Bladder exstrophy also known as ectopia vesica is defined as a rare congenital anomaly involving the urinary bladder wall, lower anterior abdominal wall, pubic bones and external genitalia[1].

Bladder exstrophy is a result of persistence of overdevelopment of the cloacal membrane on the lower anterior abdominal wall area preventing lower abdominal muscles to fuse. This condition could result into exstrophic urinary bladder alone with or without epispadias or cloacal exstrophy[1].There is little evidence for genetic predisposition of exstrophy and epispadias. The chance of having a child with bladder exstrophy from exstrophic parent is 500 times greater than general population[1,2]. Bladder exstrophy is rarely associated with other anomalies like rectal prolapse, spinal anomalies or undescended testes[2,3].

Bladder exstrophy is classified according to the presence or absence of associated congenital cloacal anomalies into simple or complex (simple bladder exstrophy means without cloacal anomaly and complex bladder exstrophy means with cloacal anomaly)[1-3].

The incidence of bladder exstrophy is estimated to be 1:30000-1:50000 live birth with male to female ratio 2:1[1-3].

Diagnosis of bladder exstrophy is rarely discovered prenatally by ultrasound. After delivery, the diagnosis of bladder exstrophy is obvious by inspection[2,3].

The management of bladder exstrophy is to close the urinary bladder and abdominal wall defects, preserve the urinary continence, approximation of the widely separated pubic bones and reconstruction of external genitalia. The surgical treatment depends on the experience and advances in pediatric surgical techniques as well on neonatal intensive care management[4-6].

The surgical techniques for repair of bladder exstrophy could be single or multiple staged approach based on the experience of pediatric surgeon[5,6].

Long follow-up is required to assess bladder compliance, renal function and external genitalia appearance. In cases of small urinary bladder after repair, augmentation cystoplasty is indicated. Bladder neck reconstruction is also indicated for persistent incontinence[6].

CONCLUSION

Bladder exstrophy is a rare congenital anomaly. The disorder involves the urinary bladder wall, lower abdominal wall musculature, genitalia and pubic bones. This disorder can be simple or complicated depending on the presence or absence of cloacal anomaly. The treatment of this condition is surgical reconstruction, which could be done as a single or multi-staged approach. Long term follow-up is recommended to evaluate renal function and bladder compliance.

Potential conflicts of interest: No

Competing interest: None **Sponsorship:** None

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