

# Delayed recognition of bladder exstrophy and persistent cloaca: An Omphalocele exstrophy imperforate anus spinal abnormality (OEIS) Variant

Itunu O. Arojo MD, Lynn L. Woo MD.



# HPI

- Newborn term infant with abnormal prenatal ultrasound on 22- week anatomy scan.
  - Widened pubic diastasis
  - Dilated rectosigmoid colon
  - Mild polyhydramnios
  - Distended bladder in pelvis protruding into the omphalocele
    - Empties during exam
- Mother aged 31 G3P3, otherwise healthy
- Prenatal MRI obtained to confirm findings

TT: ms  
FoV 330\*330  
16. ax

C: 612.0, W: 1265.0

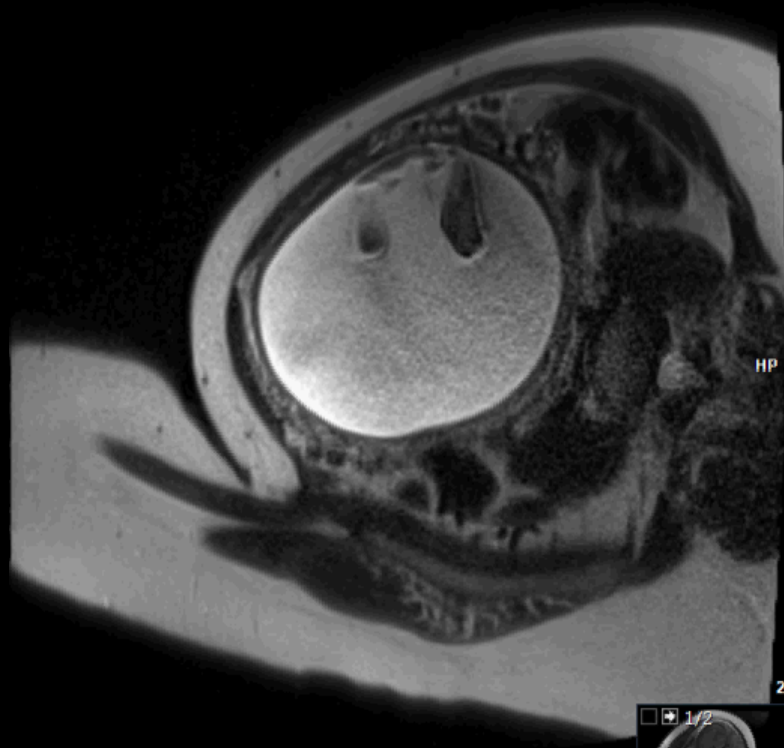
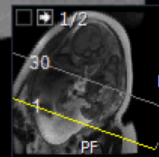


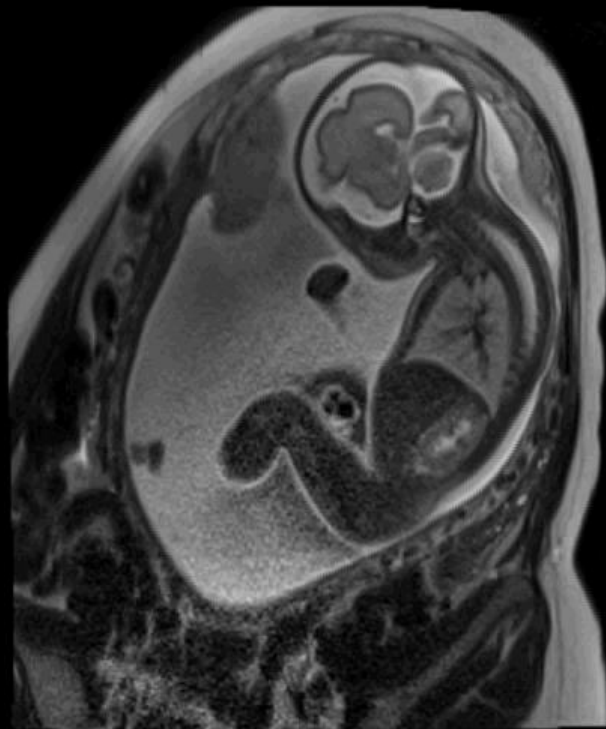
Image no: 1  
Slice 1 of 30  
03/22/2019 - 12:56:51 PM

LP



TT: ms  
FoV 309\*330  
14. sag

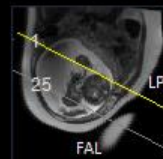
C: 570.0, W: 1148.0



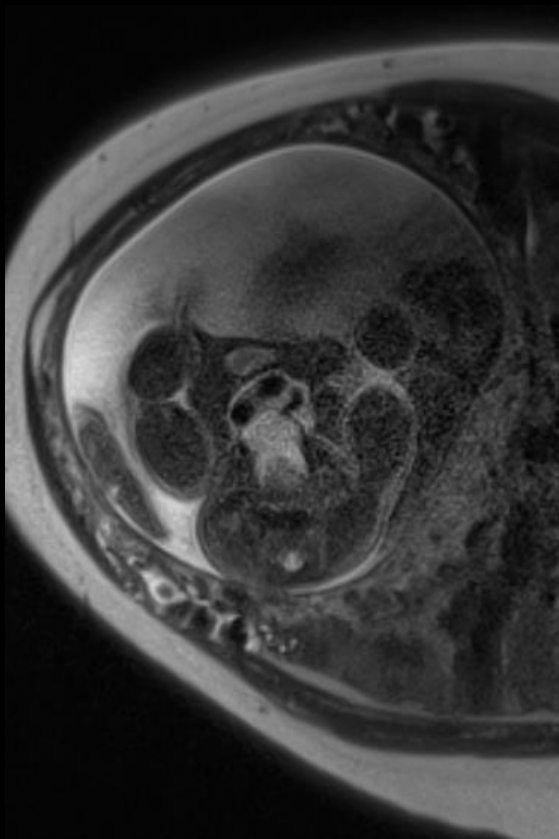
L

Image no: 1  
Slice 1 of 25  
03/22/2019 - 12:54:17 PM

PF



5



# Physical Exam

- Omphalocele
- Asymmetric labia/clitoral tissue
- Fistulous connection to the bladder
- Imperforate anus with a single mucosal-lined opening in perineum



# Diagnostic evaluation

- Cystoscopy/EUA
  - cloacal malformation
  - Appearance of an intact urethra/bladder neck complex
  - vaginal duplication
  - fistulous tract to the rectum

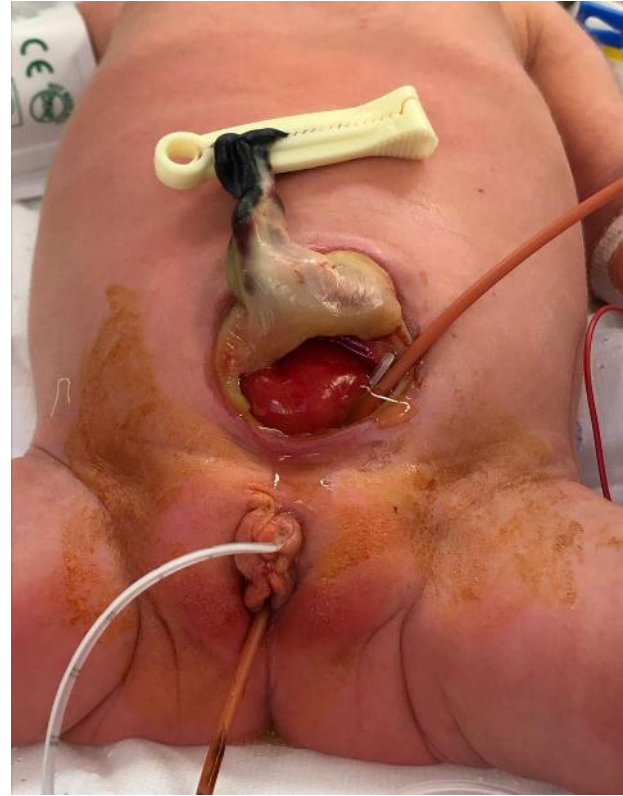
# Diagnostic evaluation

- Cystogram
  - smooth-walled bladder without evidence of reflux
  
- Spinal ultrasound was normal.





- DOL 4
  - Omphalocele rupture revealed bladder exstrophy



# Hospital course

- She underwent a diverting colostomy on DOL 4.
- Discharged home with seran wrap coverage and prophylatic antibiotics
- Cloacal repair and closure of bladder exstrophy is planned at age 6 months of age.

# Discussion

- Cloacal exstrophy is a rare and complex congenital anomaly
- Incidence of 1/200,000-400,000 live birth
- Occurs along a spectrum
- Associated omphalocele often contains bowel or liver
- Prenatal diagnosis of exstrophy is difficult to make. Often a diagnosis of omphalocele/gastroschisis made and the exstrophy overlooked .

# Conclusion

- This case highlights the complexity associated with diagnosis of exstrophy- epispadias complex. Despite advances in prenatal imaging, diagnosis of this condition relies upon physical examination with the knowledge that each presentation can be different; not fitting in one box.

# References

- Woo L., Thomas J., and Brock J.: Cloacal exstrophy: a comprehensive review of an uncommon problem. J Pediatr Urol 2010; 6: pp. 102-111
- Phillips M.: Spectrum of cloacal exstrophy. Semin Pediatr Surg 2011; 20: pp. 113-118
- Carey J.C., Greenbaum B., and Hall B.D.: The OEIS complex (omphalocele, exstrophy, imperforate anus, spinal defects). Birth Defects Orig Artic Ser 1978; 14: pp. 253-263