No Disclosures
Neonatal urinary ascitis

- Rare condition

- Etiology: Obstructive uropathy (bladder outlet obstruction, neurogenic bladder, ureteric obstruction), iatrogenic, spontaneous bladder perforation

- Clinical emergency, immediate resuscitation and management (potential life threatening, reversible & good prognosis)
Aim – To share 2 cases of perinatal urinary ascites with unusual etiology and discuss management challenges
Case 1

History

- 17 days old, male, from neighboring country presented with failure to pass urine after birth

- Past history:
  - Born at 35 weeks via LSCS, 1.9 kg
  - Antenatal scan @ 32 weeks- distended bladder
  - Post natal USG- full bladder, b/l severe hydronephrosis
  - Failed catheterisation x2, Suprapubic cystostomy drained urine x 2 weeks
History

- Exploratory laparotomy @ 2 weeks for suspected catheter migration - catheter in place, urine in retroperitoneal space

- Bladder closed with retroperitoneal drain, IDC in situ, post op abdominal distension, abdominal and scrotal wall edema, urine from drain and wound, worsening renal function, acidosis, and sepsis

- Transferred to Singapore
Imaging revealed ascitis, MCU showed bladder rupture in peritoneal cavity

Exploration, repair of posterior bladder rent & mini vesicostomy done

Post operative recovery good, renal function stabilized
• 4 weeks later cystogram done showed dilated posterior urethra with PUV

• Fulguration done at 3 months of age
Post fulguration, poor urinary stream on clamping vesicostomy

- Repeat cystogram through vesicostomy at 9 month, showed anterior urethral obstruction
- Cystoscopy & AUV fulgurated, vesicostomy was closed
- Child is voiding well. Had high resting pressures, now on oxybutynin, renal functions normal.
Discussion


- We missed the AUV during first time cystoscopy (radiologically not demonstrated), as we need to carefully look for the flap valve with a hook electrode.

- Patency of distal urethra should be ensured before closing vesicostomy
Case 2
History

- A full term, male neonate with Klinfelter Syndrome presented with a large urinary ascites during perinatal period along with a large cyst next to the suspected bladder detected on antenatal scans.
- He had renal agenesis on left side.
- Severe acidosis, Respiratory distress, poor renal function.
- He was managed with Intubation, urgent peritoneal drainage to improve the ventilation and urethral catheterization at birth.
Management

- He needed two weeks of ventilatory support due to gross abdominal distension and three weeks of peritoneal fluid drainage.
- MRI and MCU: bladder outlet obstructed by a large utricular cyst.
The utricle cyst was not visualized in earlier post natal scans in the presence of ascites and urethral catheter but it remanifested later.

The renal function also normalized gradually thereafter.

He underwent a vesicostomy and is planned to be managed with excision of the cyst at a later date.
Conclusions

- Neonatal urinary ascites is uncommon and usually presents as a clinical emergency.
- The diagnosis and treatment can be challenging if the cause is rare.
- The management of these cases should be planned carefully based on the anatomical and functional status of the urinary system.
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Thank You