

Management of a case of Imperforate Hymen with Haematocolpos and Haematometra.

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History: 17-year-old girl presented to the A&E with abdominal pain and retention of urine. A Foley’s catheter was inserted to relieve her retention. Patient gave a history of not having any menstruation anytime since attaining adolescence – h/o Primary Amenorrhoea. She did not give any history of any coitarche as well. She had normally developed secondary sexual characters and body habitus. On examination in presence of chaperone.

P/A: revealed a tense cystic midline mass well above the symphysis pubis almost up to the level of umbilicus. The mass was non tender and freely mobile. It was dull on percussion. The margins were well delineated. There was no guarding, rigidity and rebound tenderness. **Local perineal examination:** on parting the labia, revealed a tense cystic swelling at the introitus. The margins of the membranous cyst were seamlessly continuous with the surrounding vaginal walls. Vaginal digital examination was not possible. On applying gentle abdominal pressure on the abdominal mass, the membranous bulge became more prominent.

Diagnosis: Imperforate Hymen with Haematocolpos and Haematometra. **Investigation:** Patient had a transabdominal ultrasound scan which confirmed the diagnosis. The overall mass size was found to be 26x10.3x11.8 cms, filled with homogenous low level echogenic fluid suggestive of haematocolpos. Kidneys were normal.

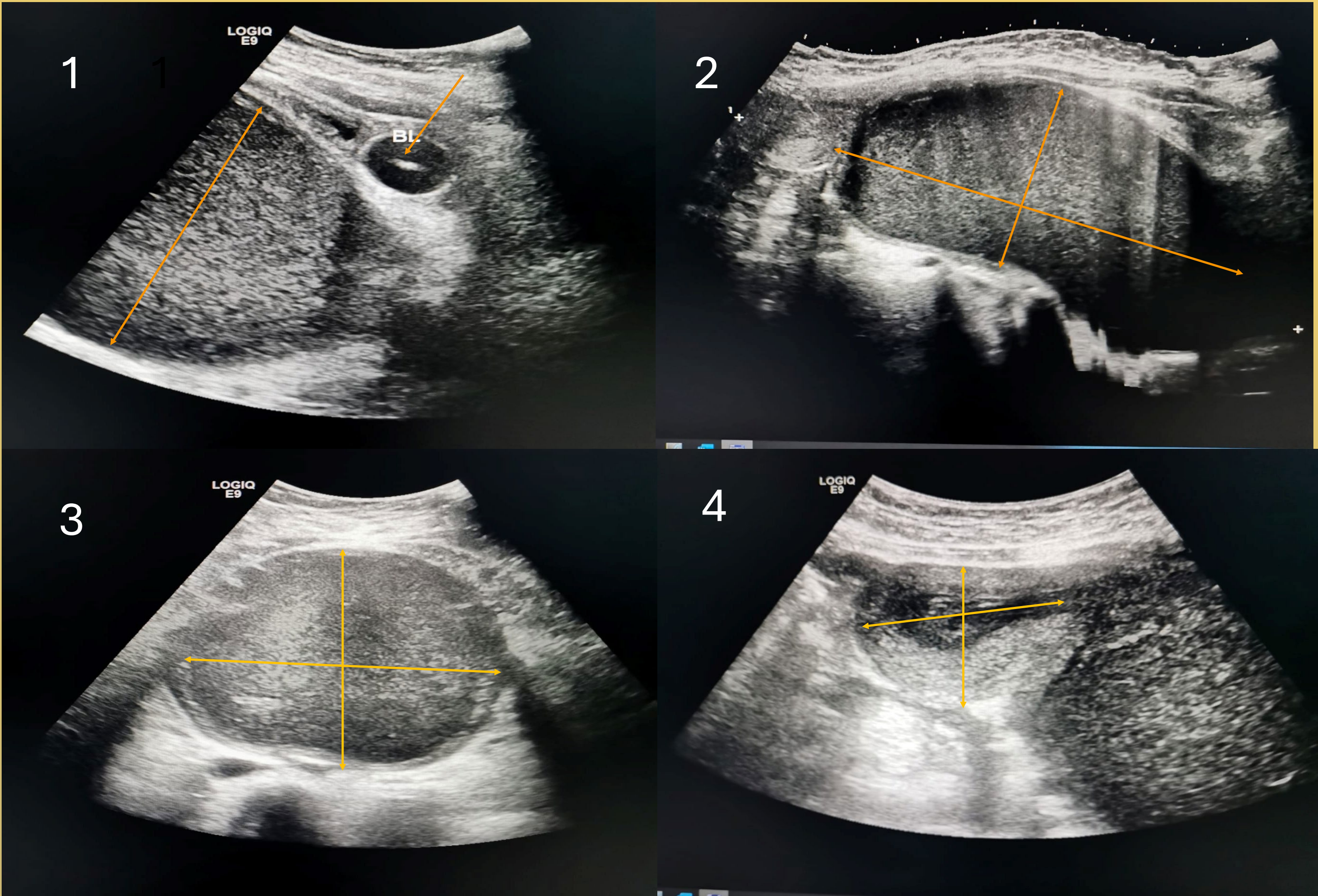
Planned operation discussed with patient - Incision and drainage of the haematocolpos and the haematometra by a cruciate incision under general anaesthesia. **Operative findings:** Small cruciate incision made at the most prominent point on the hymen. Thick chocolate coloured pent-up blood drained. Suction cannula was used to assist in drainage together with gentle pressure on the abdomen. Total of approximate 3 litre of altered blood was drained. Hymenal edges were trimmed and sutured with dissolvable sutures. Antibiotics were prescribed. Patient was discharged home after uneventful recovery.

Discussion: The prevalence of imperforate hymen is estimated at 1 in 1000 to 1 in 2000 females – 0.05% to 0.1%; An imperforate hymen is a rare cause of primary amenorrhea. Most cases are thought to occur sporadically. Rare cases of familial occurrence has been mentioned in case reports.

The incidence of urinary retention and acute kidney injury associated with imperforate hymen on presentation is approximately 20% and 2%, respectively.

Presentation: Infant: Mucocèles and mucocolpos – due to vaginal and cervical secretions from maternal endogenous oestrogen effect;

Early paediatric: urinary retention, hydronephrosis with UTI, Acute lobar nephronia from urinary tract obstruction.

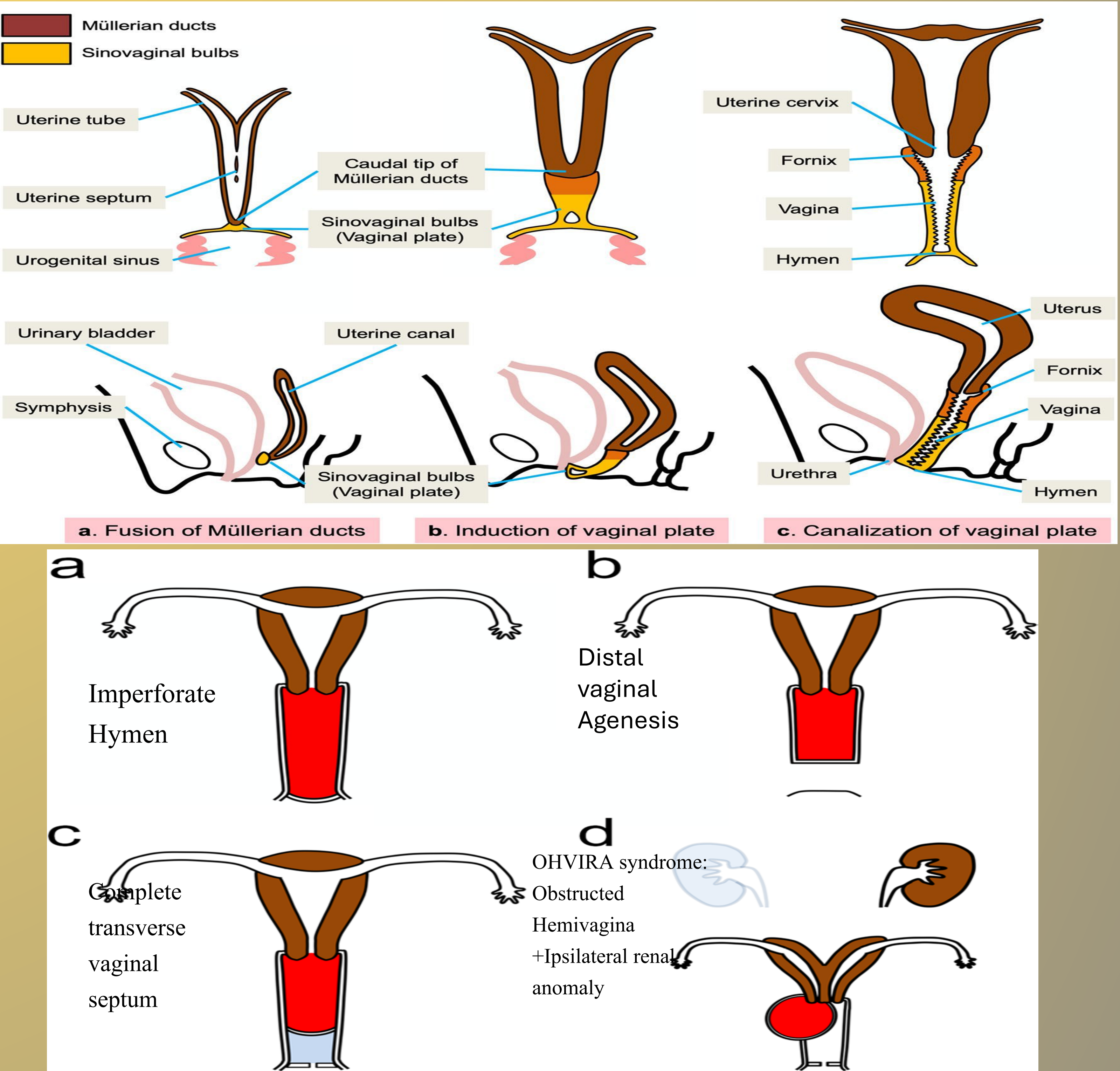


TAS photos showing evidence of a huge haematocolpos. 1) haematocolpos arising from the pelvis with the catheter balloon in front, 2) Haematocolpos extending into abdomen up to the umbilicus. 3) Transverse section 4) Haematocolpos with the uterus on top with haematometra

Adolescent: Cyclical monthly pain; primary amenorrhoea; pelvic and back pain; constipation; radiated pain secondary to sacral plexus irritation; urinary retention; infection; PID; Recurrent UTI; Coital incontinence; urethral coitus; hydronephrosis. **D/D:** a periurethral cyst, ectopic ureterocele, prolapse, and vaginal botryoid sarcoma., Other müllerian anomalies., hymenal polyps.

Imperforate hymen is distinguished from a periurethral cyst by identification of the urethral meatus. Ectopic ureteroceles may prolapse from the urethra and have a congested appearance. Vaginal botryoid sarcoma typically has a multilobulated appearance.

- Treatment Options::**
- 1) Hymenectomy using cruciate or annular incisions
 - 2) Hymenectomy using electrocautery
 - 3) Placement of a 16Fr Foley catheter with 10 ml balloon insufflation to preserve hymenal tissue
 - 4) Carbon dioxide laser treatment



Conclusion: Imperforate hymen usually has a favourable outcome with very few post operative complications. Early correct diagnosis and treatment can reduce the incidence of pelvic endometriosis.

References:

- 1) Tanitame K, Tanitame N, Urayama S, Ohtsu K; Congenital anomalies causing hemato/hydrocolpos: imaging findings, treatments and outcomes. Japanese Journal of Radiology (2021);
- 2) D Keith Edmonds; Gillian L Rose; Outflow Tract disorders of the female genital tract; The Obstetrician & Gynaecologist; 2013;15:11-7