

Hydrometrocolpos due to congenital adrenal hyperplasia (CAH)—A rare cause of bladder outflow tract obstruction in a female child

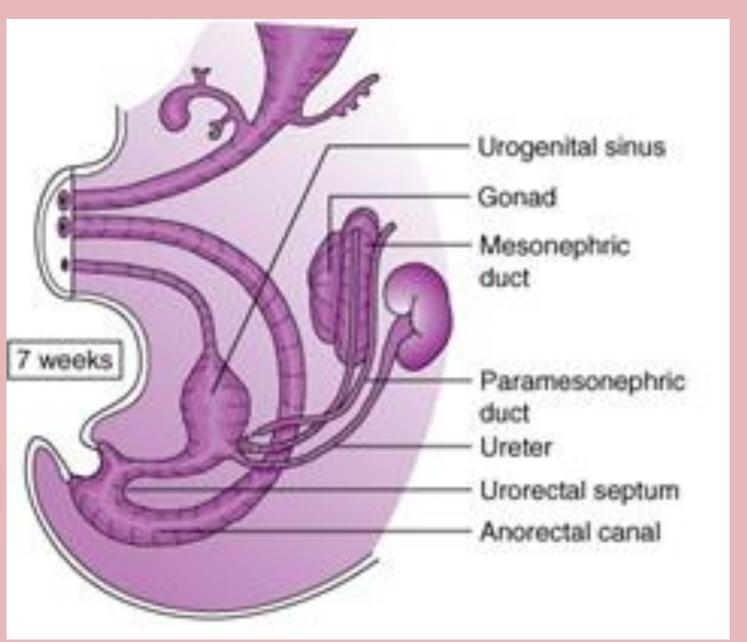
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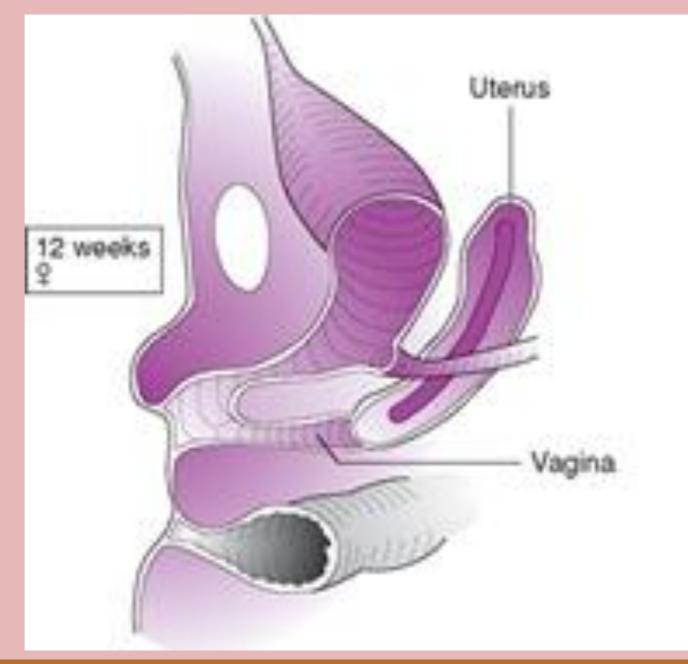
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Introduction

- Hydrometrocolpos (HMC) develops in a female child as a result of a vaginal outflow tract obstruction and accumulation of secretions
- Incidence of classic CAH is 1:14,000 to 1:18,000 births.
- 21 hydroxylase deficiency accounts for 95% of CAH
- Androgen exposure before 12 weeks of gestation leads to, labial fusion and persistent urogenital sinus (PUGS).
- Accumulation of bladder and vaginal contents in the common channel leads to pressure effect which can leads to bladder outflow obstruction (BOO) and varying degree of hydronephrosis





Case Report

- A term infant presented with abdominal distension and clitoromegaly.
- Examination, no palpable gonads and had single perineal opening with bilateral ballotable masses.

Investigation

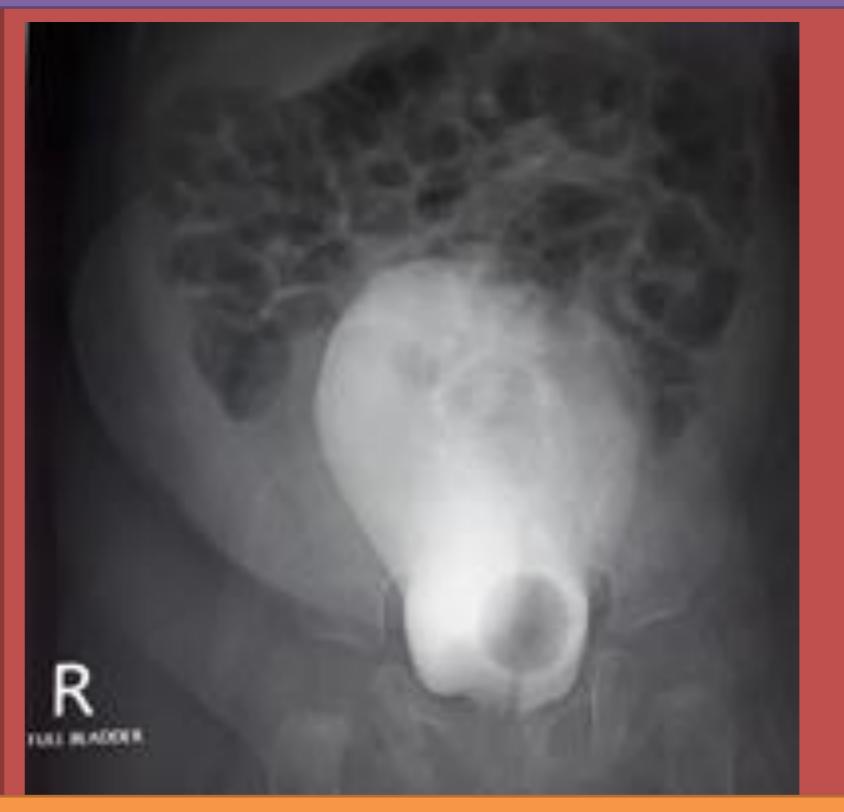
Karyotyping - 46,XX 17 hydroxy progesteron > 60nmol/l

Diagnosis

Virilized female due to congenital adrenal hyperplasi with PUGS

Imaging

- *Ultra sound (US)*
- Distended bladder and bilateral severe hydronephrosis
- Well define cystic area, posterior to the bladder suggestive of hydrometrocolpos possibly due to PUGS.
- Normal internal Female genitalia.
- MCUG
- Contrast filling was noted into a cavity
- No evidence of fistulous tract extending from the cavity





Management

- BOO and bilateral sever hydronephrosis lead to hypertension, which needed vesicostomy.
- Later vesicostomy was reversed and had normal urinary flow from the urethra.
- Treatment with hydrocortisone and fludrocrtisone was commenced.
- Awaiting for correction of PUGS and genitoplasty.

Conclusion

- This case highlights the varying degree of urogenital abnormality caused in CAH.
- Multidisciplinary care is needed for patient with androgenital syndrome in CAH.





