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CLINICAL IMAGE

Duplicated bladder

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An 18-month-old girl presented with a history of a cloacal exstrophy variant with an imperforate anus. Surgical exploration showed vaginal, uterine, bladder and urethral duplication. In workup for ileostomy obstruction, CT demonstrated a sagittal separation traversing the bladder (Fig. 1, arrows). VCUG was obtained secondary to UTI. Both urethras were catheterized; imaging demonstrated two noncommunicating bladders (Fig. 2) in side-to-side orientation. Note the wide pubic symphyseal diastasis. This case would most accurately be described as a covered duplicate exstrophy.

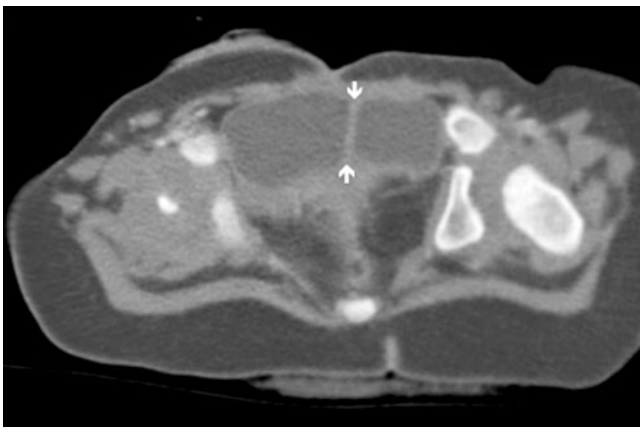

Fig. 1 CT of bladder

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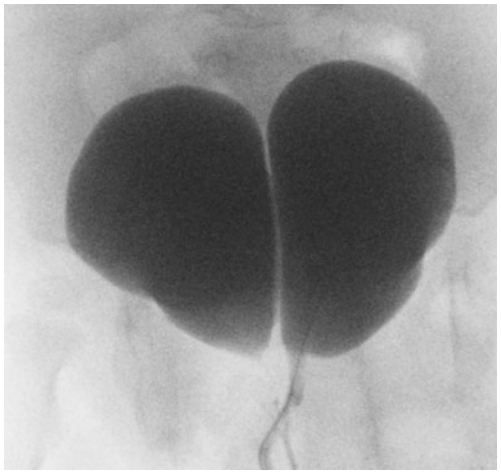

Fig. 2 VCUG

Complete bladder duplication is rare, with approximately 70 cases reported of equal prevalence in boys and girls [1]. Duplicate bladder exstrophy is even more uncommon [1, 2]. Theories of etiology vary and range from an abnormal septum doubling the allantoic anlage to partial twinning of the caudal embryo [2]. In females, complete bladder duplication is more common in the sagittal plane [1]. There is frequent association with cloacal, anorectal, renal and vertebral anomalies, including duplication of the lower GI tract and external genitalia [1].

References

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