

Female Urology

Acute Urine Retention Caused by Hematocolpos After Failed Hymenotomy in 23 Year Old Female



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ARTICLE INFO

Article history:

Received 7 January 2015

Accepted 13 January 2015

Available online 11 February 2015

Keywords:

Imperforate

Hymen

Retention

Female

ABSTRACT

Mechanical obstruction by hematocolpos can result in acute urinary retention.¹ Imperforate hymen is a rare condition that presents mainly with primary amenorrhea, cyclic abdominal pain and rarely, urine retention in pubertal girls.² This is a 23-year old female who presented with acute urine retention. She had history of previous vaginal repair of imperforate hymen. On examination patient was found to have imperforate hymen. After fixing a catheter, an US scan showed hematocolpos that was confirmed CT. She was eventually underwent hymenectomy. We conclude that in peripubertal female with acute urinary retention, hematocolpos should be considered.

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Introduction

The incidence of imperforate hymen is approximately 1 in 2000 girls.¹ The main presentation is primary amenorrhea and cyclic pain. Urine retention is less common presentation.^{2,3} Acute urinary retention can occur due to the pressure effect of the distended vagina on the bladder and urethra.⁴

Case

We present a 23-year old single female who presented to the emergency department with urine retention for 1 day. On examination patient was found to have palpable distended bladder, imperforate hymen and female hypospadias of the urethra. After fixing a Foley catheter 1200 ml of turbid urine was drained.

Patient gave history of repair of imperforate hymen repair (hymenotomy) 4 years ago. She is amenorrheic for the last 6 months. Abdomino-pelvic ultrasound was done that showed distended vagina with fluid content (Fig. 1). CT scan of the abdomen and pelvis showed distended vagina with fluid content that has a

Hounsfield unit of 60 suggestive of blood (Figs. 2 and 3). Patient underwent hymenectomy by gynecologist.

Discussion

Acute urine retention in young females is uncommon present, Mechanical compression by distended hematocolpos due to imperforate hymen is one of the differential diagnosis.⁵

The aim of management is to restore vaginal outflow through hymenotomy using simple vertical, T-shaped, cruciate, X-shaped and cyclical incisions.⁶ Hymenotomy can be used in recurrent cases. The outcome is relatively good and the recurrences are rare.⁷

Here in this case, we present a rare case of urine retention caused by compression of hematocolpos due to recurrent imperforate hymen after failed hymenotomy. Successful treatment was achieved though hymenectomy. Patient restored regular menstruation and voiding function postoperatively for 6 months follow up.

Conclusions

Imperforate hymen should be considered in the differential diagnosis of urine retention in young females. Hymenectomy is a definitive management option after failed hymenotomy.

Conflict of interest

The authors declare that they have no conflict of interest.

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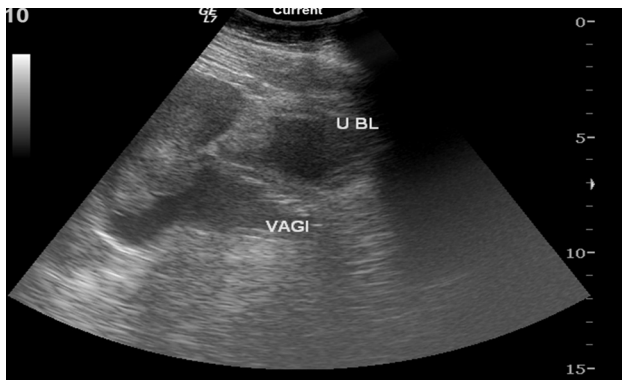


Figure 1. US shows distended vagina posterior to the urinary bladder.

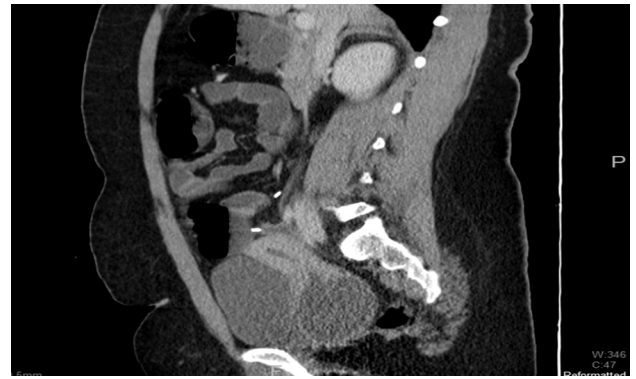


Figure 3. CT scan sagittal reformatted image shows the hematocolpos posterior to the urinary bladder.



Figure 2. CT scan axial cuts shows hematocolpos.

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