

Haematocolpos Presented with Acute Urinary Retention in a Young Adolescent Female: A Rare Case Report

Dr. Vishnu Agrawal¹, Dr. Shikha Gupta^{2*}, Dr. Rupesh Gupta¹, Dr. Supriya Basu¹

¹Department Of Urology, R G Kar Medical College, Kolkata (Affiliated to West Bengal university of Health Sciences), India

²Department of Endocrinology, Ram Manohar Lohiya Hospital, New Delhi, India

*Corresponding author

Dr. Shikha Gupta

Article History

Received: 04.09.2017

Accepted: 09.09.2017

Published:30.09.2017

DOI:

10.36347/sjmcr.2017.v05i09.008



Abstract: We hereby report a case of acute retention in a thirteen years old girl secondary to Haematocolpos. She had no significant medical history. On examination, imperforate hymen with bulge was seen. Neurological examination was normal. Bowel habits were normal. She was treated with urgent catheterisation followed by hymenotomy operation. In this case report we are pointing towards different causes of urinary retention in adolescent girl.

Keywords: Haematocolpos, urinary retention, imperforate hymen

INTRODUCTION

Acute urinary retention in adolescent girl is a uncommon phenomenon and usually caused by constipation , neurological dysfunction or pelvic tumor. Although Imperforate hymen is commonest congenital anomaly and usually presented with primary amenorrhea with cyclical pain, this can rarely present as acute urinary retention.

CASE REPORT

A 13-year-old, female girl child presented to the urology outdoor with the complaint of acute urinary retention (AUR) and lower abdominal pain. The patient was having difficulty in passing urine for 2-3 days prior to the retention. There was

no history of fever or dysuria or constipation. Menarche not underwent at the time of presentation. General examination was essentially normal. On local

examination, the bladder was palpable up to the umbilicus. Per vaginally, a bulging imperforate hymen with bluish discoloration was seen [Figure 1].



Fig-1: Clinical examination showing bluish bulging hymen

The patient was catheterized with 12 Fr Foley's catheter under the aseptic condition and antibiotic cover; 900 ml of amber colored urine was

drained. USG whole abdomen and pelvic region showed markedly distended vagina with the heterochoic fluid collection, suggestive of

haematocolpos [Figure 2]. Uterus, ovaries and other organ were normal. Her haemoglobin was 12.2 g/dl, total leucocytes count was 7600 cells/ cubic millimetre of blood, urea was 20 mg/dl and creatinine was 0.6 mg/dl. Urine analysis was normal and urine culture was sterile. Hymenotomy for haematocolpos was performed

under regional anaesthesia. A cruciate incision was made over hymen and approximate 1 litre of chocolate colored altered blood was drained. The urethral catheter was removed on a first postoperative day; patient voided successfully. No recurrence of AUR seen in 6 months of follow-up.

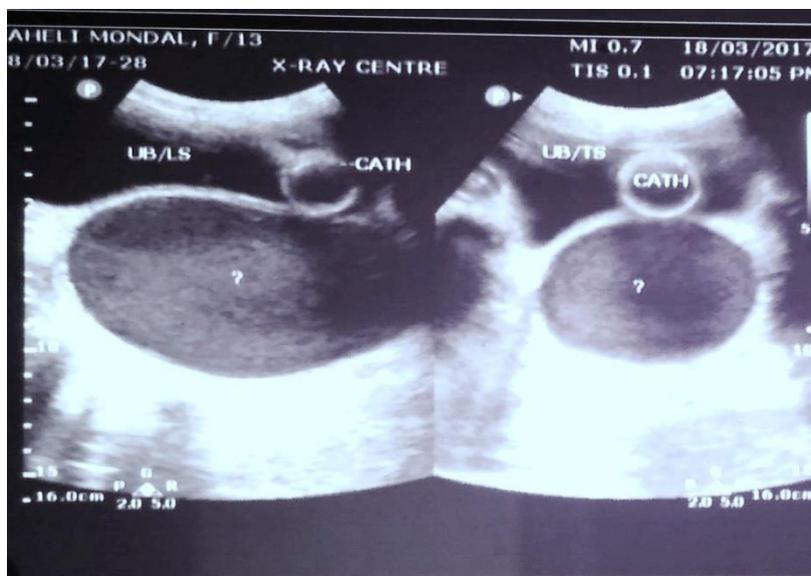


Fig-2: USG pelvis showing distended vagina with catheter bulb in bladder

DISCUSSION

Acute urinary retention in female children is a relatively uncommon phenomenon because of small length, straight course and relatively large diameter of the urethra. Common causes are lower urinary tract stone, neurological disorders, trauma, urinary tract infection, ureterocele, constipation and iatrogenic [1]. Imperforate hymen in an adolescent girl is a rare cause of urinary retention [2].

Imperforate hymen is a most common congenital anomaly in the female genital tract with an incidence of 1 in 2000 females [3]. Some cases are identified at birth because of mucoïd collection [4] but most girls present at puberty with symptoms of primary amenorrhoea and cyclical pain [5]. Symptoms arise from the accumulation of menstrual blood in uterus and vagina. Their distention causes mild to moderate discomfort. Further distention of vagina may cause obstruction of the urethra, as the urethra has a very close anatomic relationship with the anterior vaginal wall. Differential diagnosis of imperforate hymen includes: [6]

1. Conditions causing Obstruction of female genital tract: labial synechia, vaginal atresia/agenesis, hymenal atresia, transverse vaginal septum.
2. Conditions with introital mass: urethral prolapse, prolapsing ectopic ureteroceles, urethral inclusion cysts
3. Pelvic masses: ovarian cysts, mesenteric cysts, lymphomas.

Management includes catheterization of bladder followed by drainage of uterus and vagina by cruciate incision over hymen under aseptic condition [7]. The uterus should not be squeezed in order to increase drainage because this may cause reflux of flow into the fallopian tube and peritoneal cavity which may cause adhesion and endometriosis and both may lead to infertility [4]. In patients with imperforate hymen diagnosed at pre-school or school age optimal time for surgery is before menarche because estrogen produced at this stage will limit scarring and therefore limit the relapse of disease [8].

CONCLUSION

Imperforate hymen is a rare and easily missed condition that can cause acute urinary retention. Therefore clinician should keep in mind that imperforate hymen can be a rare but important cause of urinary retention, especially in the adolescent female.

ACKNOWLEDGEMENT

We have not taken any kind of research grant support.

REFERENCES

1. Schorge JO, Schaffer JI, Halvorson LM, Hoffman B, Bradshaw K. Anatomic disorders. In: Schorge JO, eds. Williams Gynecology. 1st ed. New York: McGraw Hill Medical. 2008;412-413.
2. Lopez Lopez JA, Murillo Perez C, Rosa Arias J, Abril Baquero G. Urinary retention caused by

- haematocolpos secondary to imperforate hymen. Arch Esp Urol. 1993; (46): 732–3.
3. Asqari SA, Ghanaie MM, Simforoosh N, Kajbafzadeh A, Zareet A. Acute urinary retention in children. Urol J. winter. 2005;2(1):23–7 .
 4. Sieberg R, Tenhunen A, Yslostatlo OP. Diagnosis of mucocolpos and haematocolpos by ultrasounds; two case reports. J clin ultrasound. 1985; (141): 119–28.
 5. Nissanian AC. Hematocolpometra presenting as urinary retention. A case report. J Reprod Med. 1993; (38): 57–60.
 6. Bakos O, Berrghind L. Imperforate hymen and ruptured haemosalphinx: A case report with a review of literature. J adolesc health. 1999; (24): 226–8.
 7. Shaked O, Tepper R, Klein Z, Beyth Y. Hydrometrocolpos e diagnostic and therapeutic dilemmas. J Pediatr Adolesc Gynecol. 2008;21:317e21.
 8. Bischoff A, Levitt M, Breech L, Loudon E, Pena A. Hydrocolpos in cloacal malformations. J Pediatr Surg 2010;45:1241e5.