

Prolonged Sterile Dysuria as a First Presentation of Pyocolpos

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Pyocolpos is a rare clinical finding in vaginal atresia, especially in childhood. We present a child with pyocolpos and a long history of severe sterile dysuria before she was admitted to hospital with fever, urinary tract infection, and abdominal mass.

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INTRODUCTION

Pyocolpos is a cystic dilatation of the vagina due to the accumulation of pus resulting from the genital tract obstruction. The main cause of obstruction is imperforate hymen, transverse vaginal membrane, or vaginal atresia.^{1,2} Pyocolpos is a rare clinical finding in vaginal atresia, especially in childhood. We present a child with pyocolpos and a long history of severe sterile dysuria before she was admitted to hospital with fever, urinary tract infection, and abdominal mass.

CASE REPORT

A 30-month-girl was admitted to our hospital with fever and a long history of dysuria with no positive urine culture for infection and a normal ultrasonography result in the preceding month. She had ventricular septal defect in her history. Her primary workup showed leukocytosis, elevated erythrocyte sedimentation rate, and leukocyturia. Her kidney function was normal. Ultrasonography indicated normal kidney size and parenchyma, but grade 1 hydronephrosis in both sides was seen with a large mass in the pelvic region full of multiple cystic-shaped lesions sized 160 × 130 × 45 mm (Figure 1). Abdominal computed tomography confirmed hydronephrosis and the pelvic cystic lesion (120 × 75 × 45 mm) which had displaced the bladder forward (Figure 2).

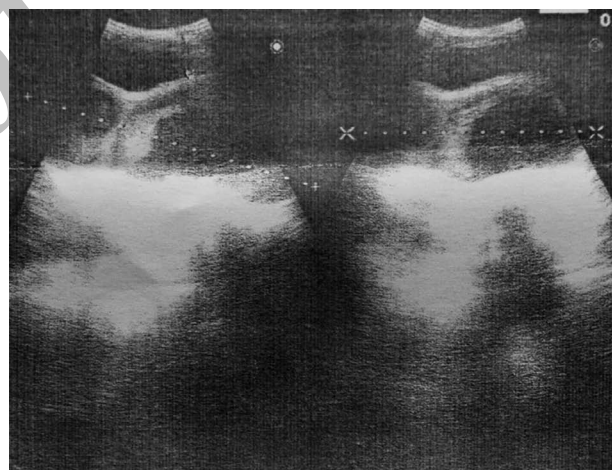


Figure 1. Ultrasonography indicated a mass in the pelvic region.

The patient underwent exploratory surgery. A large mass was seen in the lower abdomen, filled up with pus. No genitourinary fistula was seen intra-operatively. The vagina was closed completely and no dye egressed from it. A drain was inserted in the vagina and a Foley catheter in the bladder. Culture after a few days was positive for *Streptococcus agalactiae*. Postoperative cystography indicated an elliptical lesion (uterus) behind the bladder (Figure 3). Cystoscopy showed a genitourinary fistula. The fistula was closed after 2 month of vaginal correction on a second cystoscopy.

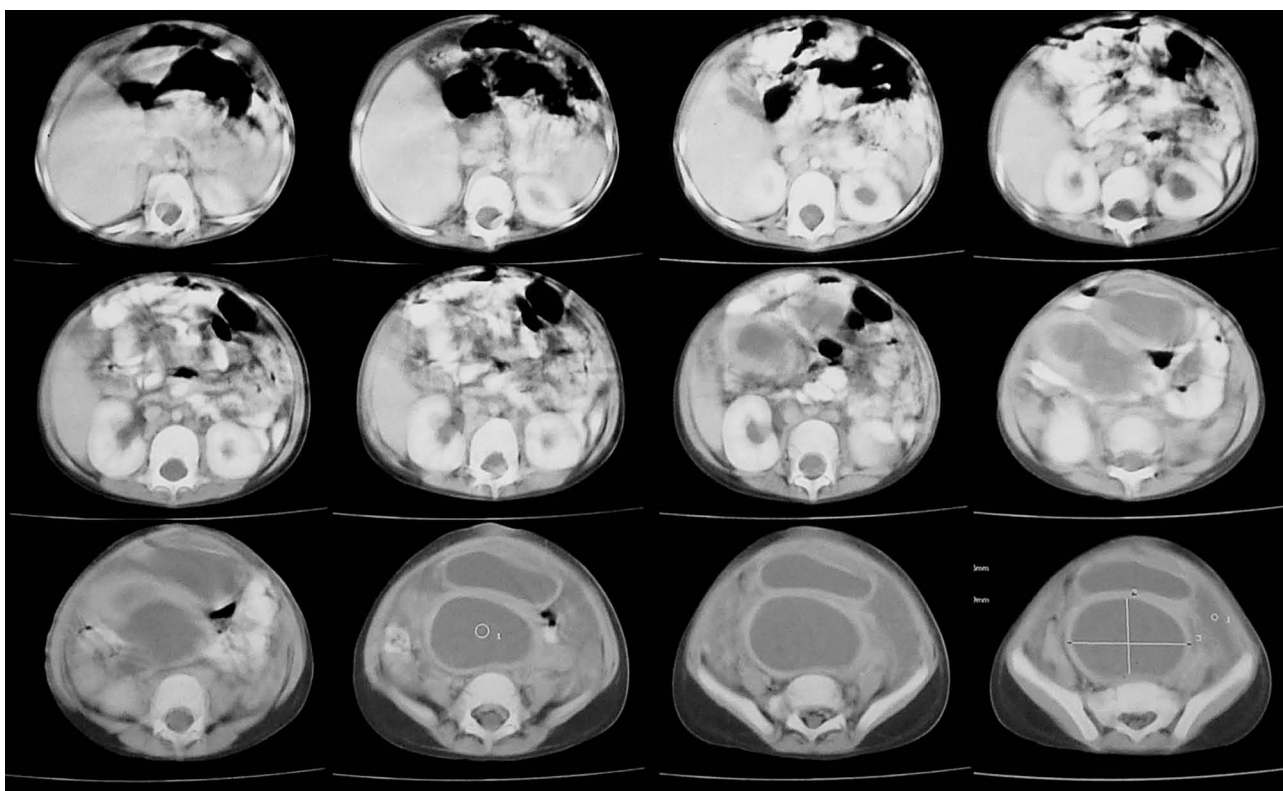


Figure 2. Abdominal computed tomography showed hydronephrosis and a pelvic cystic lesion sized 120 × 75 × 45 mm, which had displaced the bladder forward.



Figure 3. Cystography indicated an elliptical lesion (uterus) behind the bladder.

DISCUSSION

Vaginal atresia is seen in 1 in 5000 to 10 000 live female birth. The presentation of the disease usually have a biphasic pattern; in neonatal period, an abdominal mass, sepsis, and respiratory distress are the dominate symptoms, and then in puberty, primary amenorrhea, abdominal pain, difficulty in voiding, and backache occur due to uterovaginal obstruction.^{1,2} Vaginal atresia has been known as the second most common cause of primary amenorrhea in tertiary care centers.³ In a minority of patients, it has been seen with other anomalies such as polydactyly and congenital heart disease, which proposes a genetic factor to have a role in its emerging.⁴ The Mayer-Rokitansky-Kuster-Hawser, Robinow, and McKusick Kaufman syndromes have been seen with this anomaly.^{5,6}

Pyocolpos may be defined as accumulation of an excess of secondary-infected cervical secretion in vaginal cavity due to congenital atresia. It is a rare finding in childhood, usually presented as a mass in the lower abdomen; however, in rare cases, it was reported with urinary tract infection, acute gastrointestinal obstruction, and urinary retention.^{7,8}

In our patient, isolated vaginal atresia led to

pyocolpos which inflamed the adjacent bladder and created severe sterile dysuria before emerging of fever, urinary tract infection, lower abdominal mass, vesicovaginal fistula. Fistula was closed spontaneously after correcting vaginal atresia. Therefore, these serial scenarios seem to have started in atretic vagina which infected hematogenously or via its pinpoint opening, which led to fistula at the time of infection and resolved without any manipulation on fistula. In conclusion, pyocolpos may cause sterile dysuria, urinary tract infection, and vesicovaginal fistula in children.

CONFLICT OF INTEREST

None declared.

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