Hydrometrocolpos Presenting as Abdominal Distension in the Newborn

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Abstract

Hydrometrocolpos is a rare entity in the newborn period with an incidence of 1 in 16000 female deliveries. We report a rare case of a two days old female child who presented to us with marked abdominal distension at birth due to hydrometrocolpos.

Key words: Hydrocolpos, Hydrometrocolpos, Cystic, Distension

Introduction

Obstruction of the vagina with accumulation of secretions and distention of the vagina was first reported in 1856¹. When only the vagina is distended, it is termed hydrocolpos, but if there is associated uterine enlargement, the term hydrometrocolpos is applied. In the newborn, vaginal obstruction could result from high vaginal septum, varying degrees of vaginal atresia, cloacal malformation or an imperforate hymen²,³.

The Case

A two day old full term, appropriate for date, female child, born by LSCS presented to us with marked abdominal distension with mild respiratory distress since birth, non passage of urine but the child was passing stools normally. On physical examination, baby was active. There was generalized distension of abdomen and superficial veins were visible. (Figure-1). There was no hepatosplenomegaly and kidneys were not palpable. The baby passed urine adequately on catheterisation. Rest of the systemic examination was normal. There were no associated congenital anomalies and external genitalia apparently were normal.

Antenatal ultrasound revealed distended fetal abdomen with mild ascites bilateral hydronephrotic kidneys and a large cystic mass (approx 7.5×7cm) in the lower abdomen lying adjacent to the urinary bladder.

On investigation, complete blood counts and serum electrolytes, were within normal limits but blood urea and serum creatinine were raised at presentation. X-ray abdomen in upright position revealed no air descended till the rectum. Abdominal ultrasound showed cystic mass extending from stomach up to the pelvis and bilateral kidneys revealed fullness of the pelvicalyceal system with dilatation of ureters along the entire course. Preoperatively we could not arrive at any diagnosis.

Emergency laparotomy was done and the uterus was found to be massively distended reaching up to epigastrium with adhesions of uterus with the omentum and surrounding gut loops and vaginal orifice was found to be absent. Stab incision was given over anterior wall of uterus, secretions were drained, vagina created by stitching labial mucosa to vaginal mucosa. Infant feeding tube No; 7 (Figure-2) was passed through the uterine opening into newly created vagina which was left in situ. Postoperatively, blood urea and serum creatinine returned to normal.

The child had an uneventful recovery and serial vaginal dilatations were planned subsequently.

Fig 1: Preoperative; Marked abdominal distension with prominent superficial veins
by retinal dystrophy or retinitis pigmentosa, postaxial polydactyly, obesity, nephropathy, and mental disturbances or mental retardation. It is also associated with hydrometrocolpos, usually as a consequence of vaginal atresia or transverse vaginal septum. In a situation where hydrometrocolpos results from imperforate hymen, a tense protruding membrane is characteristically evident at the vulva obviating the need for laparotomy.

Current management emphasizes prenatal diagnosis with ultrasound or magnetic resonance imaging. The definitive treatment involves drainage of the accumulated fluid and establishing communication between the vaginal epithelium and the vulva. For imperforate hymen and low vaginal atresia, perineal approach is preferable. Abdomino-perineal approach is usually reserved for high vaginal atresia.

**Conclusion**

In our case the diagnosis could only be made intra-operatively. Possibility of hydrometrocolpos should be considered in any female newborn presenting with an abdominal mass of obscure origin. So, female genitalia should always be explored in every newborn presenting with abdominal distension.

**References**