



TRANSVERSE VAGINAL SEPTUM WITH HEMATO-METRO-COLPUS IN NEONATE, A CASE REPORT

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ABSTRACT Hemato-metro-colpus is a rare gynecological pathology in neonates. It is accumulation of blood in vagina and uterus. Symptoms of hemato-metro-colpus usually present by adolescence at onset of puberty but rarely diagnosed at neonatal period. We are presenting a case of neonate who presented with distension of abdomen and bilateral pedal edema. The neonate was diagnosed with hemato-metro-colpus with transverse vaginal septum with bilateral hydronephrosis by radiological investigations. Neonates who present with abdominal mass, a possibility of mullerian duct anomaly should also be considered so that early management can save such babies.

KEYWORDS : neonate, hemato-metro-colpus, vaginal septum

CASE REPORT

A female neonate of 28 days presented with complaints of abdominal distension which was increasing for 7 days and refusal to feed in the last 2 days. Distension of abdomen was gradually progressive with no difficulty in passing stool or urine and there was no history of vomiting. Baby is born out of normal vaginal delivery at 38 weeks of gestation to multiparous mother of 22 years of age. The baby cried immediately after birth with birth weight of 2.5kg. Baby was exclusively breastfed. Mother had previous one healthy child of 3 years age with no miscarriages. Mother had uncomplicated postpartum period. Antenatal ultrasonography was not done in present pregnancy. On general examination, baby was dull, pale, and bilateral pitting pedal edema with periorbital puffiness present. Weight on admission was 2.44 kg. Baby had polydactyly and no other dysmorphic features or external congenital anomalies. On abdominal examination, abdomen was distended with umbilicus shifted upwards. A firm, non-tender abdominal mass of 6x5 cm palpated with no local rise of temperature. Mass extended from pelvis till epigastrium. Liver, spleen, and kidney were not palpable. Baby had normal female external genitalia with patent anal orifice. Her chest, cardiovascular and central nervous system examination were unremarkable.

After admission in SNCU, initial investigations revealed that baby was anemic; sepsis screen was positive, raised urea and creatinine with normal liver function test. Ultrasonography of abdomen showed thick walled hypoechoic, non-vascular lesion displacing and compressing bilateral ureters and urinary bladder causing hydronephrosis and hydroureter. Differential diagnosis of uterine mass with teratoma with hydronephrosis was made. Further diagnosis was confirmed with MRI abdomen and pelvis which revealed transverse vaginal septum with hemato-metro-colpus causing upstream bilateral hydro-uretero-nephrosis. As this required surgical intervention, baby was operated on transverse vaginal septum, a cruciate incision was made and around 80 ml of altered blood was drained, and stitches were applied. Fluid samples cytology showed inflammatory cells with lysed red blood cells. Unfortunately, on second post operative day, baby died due to surgical complications.



Figure 1 : Transverse MRI abdomen and pelvis showing large volume hemato metro colpus in neonate. A case of transverse vaginal septum.

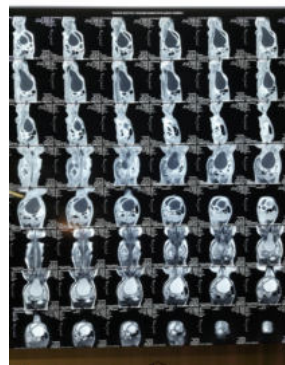


Figure 2: Sagittal and coronal MRI demonstrating large volume hemato-metro-colpus in neonate. A case of transverse vaginal septum

DISCUSSION

Mullerian anomalies are estimated to be present in 2-4 % of female population. A transverse vaginal septum occurs in 1/80000 females.¹ This occurs due to maldevelopment of urogenital sinus as it fuses with mullerian structures, rather than abnormal mullerian development. Transverse septum may be in lower vagina, mid vagina, or upper vagina. Hemato-metro-colpus is accumulation of blood in uterus and vagina causing distension of organ.² The incidence of hematometocolpus in adolescent patients is estimated about 1 in 1000-2000 but rare in pediatric patients.³ Vertical fusion defects lead to transverse septum, if imperforate, present as hematometra or hematocolpus in adolescents or with mucocolpus in infants. Usual presentation is in adolescence with primary amenorrhea, cyclic pain or a pelvic mass due to accumulation of menstrual fluid proximal to obstruction. 1-2 Hemato-metro-colpus is very rare in neonates. Accumulation of blood in neonatal uterus is due to withdrawal of maternal hormones post birth.¹ We are presenting a rare case of neonate with transverse vaginal septum causing hemato-metro-colpus, one of its first kind. Possible differential diagnosis include pyometocolpus, hydrometrocolpus, mucocolpus, abscess and myometrial corpus.⁴ Uterine anomalies are usually diagnosed in neonatal period or during adolescence at the onset of puberty.⁵

Management of hemato-metro-colpos almost always requires surgery to drain the blood and repair the blockage or anomaly.⁶ Many approach it with horizontal, lunate or cruciate incision, excision of excess tissue and approximation of mucosal edges. Complete resection of transverse septum, with primary anastomosis of upper and lower mucosal segments, should be attempted.¹

CONCLUSION

Neonatal hemato-metro-colpus is a rare but treatable cause of abdominal mass in neonate. Clinical suspicion, examination, diagnosis, radiological confirmation, and early surgical treatment play a crucial role. So high index of suspicion will help in management and saving such lives.

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