

A rare case of utero-vaginal prolapse presenting at birth without spinal defect**Dr. C Suresh Kumar¹, Dr M Alimelu², Dr Namala Bharadwaj³, Dr Usha Rani Hasthi⁴, Dr Neethika Ashwani⁵, Dr Suguna Chejeti⁶**¹HOD Neonatology, Niloufer Hospital, Lakdikapul, Hyderabad²Professor of Pediatrics, Niloufer Hospital, Lakdikapul, Hyderabad³DM Neonatology, 1st year PG, Niloufer Hospital, Lakdikapul, Hyderabad⁴DM Neonatology, 3rd year PG, Niloufer Hospital, Lakdikapul, Hyderabad⁵SNCU Medical Officer, Niloufer Hospital, Lakdikapul, Hyderabad⁶DM Neonatology, 3rd year PG, Niloufer Hospital, Lakdikapul, Hyderabad***Corresponding author**

Dr Namala Bharadwaj

Email: namalabharadwaj@gmail.com

Abstract: Neonatal genital prolapse is a rare condition in neonates, it occurs when pelvic organs slip from their normal anatomical positions and presents as a mass protruding from the vulva associated with spinal dysmorphism. We bring to your attention the case study of a female child presenting with fleshy mass protruding from vagina immediately after delivery. Clinical examination and investigation revealed it as utero-vaginal prolapse and was not associated with spinal dysmorphism. Uterus was carefully repositioned in to pelvis with simple digital reduction under anesthesia without any further recurrence.**Keywords:** neonate, uterus, vagina, prolapse, spina bifida.

INTRODUCTION

Utero-vaginal prolapse is the downward descent and protrusion of the uterus and vagina to the exterior via the introitus [1]. Uterine prolapse is commonly seen in the geriatric age group. (2) Genital prolapse in the newborn presenting at birth is very rare [1] usually detected after the first week; and it is associated with spina bifida in 86% of cases [3]. Neonatal genital prolapse can also occur in the absence of an underlying spinal defect [4]. Relatively few cases have been documented on UVP and to the best of our knowledge, not more than 10 cases of isolated neonatal UVP without spinal dysmorphism have been reported in modern literature [1]. We would like to report case of isolated UVP without spinal defect at time of birth.

CASE REPORT

A term, 3 kg female baby was born in our hospital by lower segment cesarean section in view of breech presentation with prolonged labour noted to have pink fleshy mass projecting from the vagina immediately after birth. Mother was a primiparous 22 year-old, non consanguineous marriage, antenatal history was uneventful, with regular antenatal check up.

On examination, there was an irregular mass measuring 5 x 4 cm, dusky red in colour, congested and oedematous protruding from the introitus. The wall was thrown into folds and on close inspection revealed rugae consistent with vaginal epithelium (Fig 1). The apex of the mass was the cervix, and the whole uterus

appeared to lie outside the introitus. The anal orifice was normal with good sphincter tone and and meconium stained finger noted on digital rectal examination. The urethral opening was located separately above the mass, and spontaneous voiding was observed.

She had normal chest examination, and there was no mass in her abdomen and back. She moved all her limb normally, had normal reflexes and normal anal tone. Respiratory and cardiovascular systems were all normal. The skin was neither wrinkled nor thrown into folds. Skin elasticity was normal. X ray examination revealed no spinal deformities. Ultra sound abdomen showed absent uterus in pelvis with two normally positioned and sized kidneys.

Under anaesthesia, 8 fr cystoscopy was passed, urethral opening separately visible, bladder neck moderately widened, both ureteric orifice identified, no diverticuli, mass was reduced by gripping it with the right hand and gently pushing it inwards. Cervix was visible after reduction of the mass. A diagnosis of genital prolapse was made as digital reduction of the prolapse was accomplished without difficulty. To prevent re-protrusion on straining, both lower limbs were strapped. The baby was observed closely on crying and there was no recurrence of the uterine prolapse or occurrence of rectal prolapse. Digital examination at the end of a week showed the cervix to be well supported at a high level. The patient went

home uneventfully at 9th post operative day. On 1 month follow up, she did not have any recurrence and the infant's external genitalia appeared normal with no

evidence of genital prolapse with normal bowel and bladder function.



Fig-1: Utero-vaginal prolapse of newborn

DISCUSSION

Although genital prolapse was first documented in the Egyptian medical papyrus, the Ebers pa-pyrus, dated 1550 BC, neonatal prolapse was not reported until 1723 [5]. Genital prolapse occurs when pelvic organs slip from their normal anatomical positions and either protrudes into the vaginal wall [6]. The uterus and the vagina are supported by the muscular pelvic diaphragm and the condensations of the endopelvic fascia. Congenital UVP usually results from the weakness of the pelvic muscular support and the ligaments [1] it has been suggested that genital prolapse may be a local manifestation of systemic congenital anomalies that represent a defect in the musculature of the pelvic floor due to spinal defect [6]. However, neonatal genital prolapse can also occur in the absence of an underlying spinal defect [4]. Those etiological factors, which lead to congenital muscular weakness and hypoplasia of the entire pelvic suspensory and supportive tissue, pregnancies of breech presentation, prolonged labor, preterm delivery, or intrauterine growth restriction [6].

The extent of prolapse may vary, ranging from isolated vaginal prolapse to include the cervix or uterine corpus as well. Diagnosis, uterine prolapse however, is often unmistakable on exam with a characteristic pink to red fleshy mass project-ing from the vagina and can be readily confirmed with restoration of normal anatomy upon reduction of the prolapsed [2,7]. Differential diagnosis of interlabial mass in neonates includes cervical and vaginal polypi, urethral prolapse, paraurethral cyst and rhabdomyosarcoma. Cervical and vaginal polypi are self limiting disease, and usually there is no cervical os at examination. Urethral prolapsed and paraurethral cyst usually associated with urinary symptoms. Rhabdomyosarcoma or botryoid

sarcoma is characterized by fleshy and lobulated mass [7, 8].

A prolapsed uterus carries increased risk of morbidity with progressing time, and inflammation and infection in a newborn baby [4, 9]. Early treatment of prolapse is important to prevent injury and metaplasia of the endometrial lining from prolonged exposure. This possibly may affect fertility later in life [1]. Historically, prolapse in the neonatal period was treated with cervical amputation or hysterectomy. Since that time, innovative therapies have been suggested [10] which can be either conservative or operative have been used in the treatment of genital prolapse in the neonates [1]. Most authors favor initial digital reduction which has a success rate of more than 90%. The major challenge after the initial digital reduction is the recurrence of prolapse once the intra-abdominal pressure rises during crying or straining, and other conservative management like pessaries, vaginal tampons, use of a two-way catheter, purse string suturing of vaginal wall and even temporary fusion of the labia [1]. Surgical interventions like uterine ventrosuspension, sling, abdominal or sacral cervicopexy are indicated when conservative treatment fails such as recurrent prolapse despite of repeated reduction [4, 5, 7].

REFERENCES

1. Hyginus EO, John CO. Congenital uterovaginal prolapse present at birth. Journal of surgical technique and case report. 2013; 5(2):89-91.
2. Pai GK, Pai PK, Pai MR. Neonatal uterine prolapse. Pediatric surgery international. 1987 May 1; 2(3):189-90.
3. Fraser RD. Genital Prolapse in a Newborn Baby. British medical journal. 1961 Apr 8; 1(5231):1011.

4. Fathi K, Pinter A. Semiconservative Management of Neonatal Vaginal Prolapse. *Journal of Pediatric Surgical Specialties*. 2008 Dec; 2(3):40-1.
5. Lockwood G, Durkee C, Groth T. Genital prolapse causing urinary obstruction and hydronephrosis in a neonate: A case and review of the literature. *Journal of neonatal surgery*. 2012 Jul; 1(3).
6. Cheng PJ, Shaw SW, Cheuh HY, Soong YK. Prenatal diagnosis of fetal genital prolapse. *Ultrasound in Obstetrics & Gynecology*. 2005 Aug 1; 26(2):204-6.
7. Saksono S, Maulidyan A. Neonatal genital prolapse: A case report. *Journal of Pediatric Surgery Case Reports*. 2015 Apr 30; 3(4):176-8.
8. Nussbaum AR, Lebowitz RL. Interlabial masses in little girls: review and imaging recommendations. *American Journal of Roentgenology*. 1983 Jul 1; 141(1):65-71.
9. Baskaran D, Mohan P. Purse string suturing in a neonatal prolapsed uterus. *Indian Journal of Surgery*. 2012 Apr 1; 74(2):143-5.
10. Carpenter SE, Rock JA. Procidencia in the newborn. *International Journal of Gynecology & Obstetrics*. 1987 Apr 1; 25(2):151-3.