The Journal of Obstetrics and Gynecology of India (January–February 2021) 71(1):85–87
https://doi.org/10.1007/s13224-020-01326-4

CASE REPORT

Corrected Cloacal Anomaly: Obstetric Challenge—A Rare Case Report

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Received: 8 December 2019 / Accepted: 10 May 2020 / Published online: 26 May 2020

Introduction

Cloacal anomalies are a type of anorectal malformation in which the rectum, urethra and vagina fail to separate. It is an extremely rare disorder, incidence being 1 in 50,000 births [1]. It usually affects girl child. There may be only a single opening in the perineum. There may be co-existent anomalies of GIT, cardiac, renal, uterine, skeletal and limbs. Great surgical expertise is required to correct both anorectal and urogenital malformations in the childhood with significant bearing on the reproductive outcome in later life.

Case Report

Mrs X, 26-year-old primigravida, a booked case in our institution with last menstrual period on 19 April 2016 and expected date of delivery on 26 January 2017, was admitted at 36 weeks for safe confinement. She was married for 2 years and had coital difficulty but had conceived spontaneously.

Her antenatal history was uneventful.

Past history revealed a corrective surgery in the newborn period for anorectal malformation. She was born with a single opening in the perineum, and a colostomy was done on the 1st day of life. Subsequently, a definitive surgery was done at 9 months of age followed by closure of colostomy at 18 months. She developed stricture at the anal opening for which an anoplasty was done at 5 years of age. She was having regular bowel and bladder habits.

On general examination, she had rocker bottom foot (Fig. 1). Her vitals were stable, and her systemic examination was within normal limits. Her obstetric examination revealed a single intrauterine gestation in breech presentation with adequate growth and normal liquor and fetal heart sounds.

Examination of external genitalia revealed normal labia majora and labia minora fused in the midline; there was a dimple in the midline at the region of introitus which admitted tip of little finger (Fig. 2). Urethra was not visualised, and the anal opening was scarred.

Investigations: a pelvic ultrasound taken at 19 years of age revealed uterus didelphys, ovaries, adenaxae normal and both kidneys and ureters were normal. Her 1st trimester antenatal UGS was showing disparity in dates of 2 weeks, and her last USG at 37 weeks showed abnormal lie (breech presentation) in the last trimester. Urology consultation was done as urethral opening was not seen. They performed a cystoscopy, and urethra was identified through the vaginal dimple and bladder catheterised under cystoscopic guidance (Fig. 3) Obstetric management was a planned elective caesarean at 39 weeks due to mistaken dates in I trimester ultrasound, but patient went into labour at 38.2 weeks, and an emergency caesarean section was performed on 15th January at 8 am.

Operative findings and procedure: Subumbilical midline incision was planned due to previous scar on the abdomen, and difficult abdominal entry was anticipated, and as expected, there was difficulty in entering the peritoneal cavity, inadvertent bladder injury of about 5-cm anterior bladder wall (Fig. 4).

Lower segment caesarean section performed and delivered a male baby 2700 gm as breech, Apgar 1'9. Uterus was didelphys (Fig. 5) with pregnancy in the right horn; bilateral tubes and ovaries were normal.

Bladder rent repaired by urologist whose assistance was sought initially anticipating complications; suprapubic catheter (SPC) and intra-peritoneal drain were kept. Urethral

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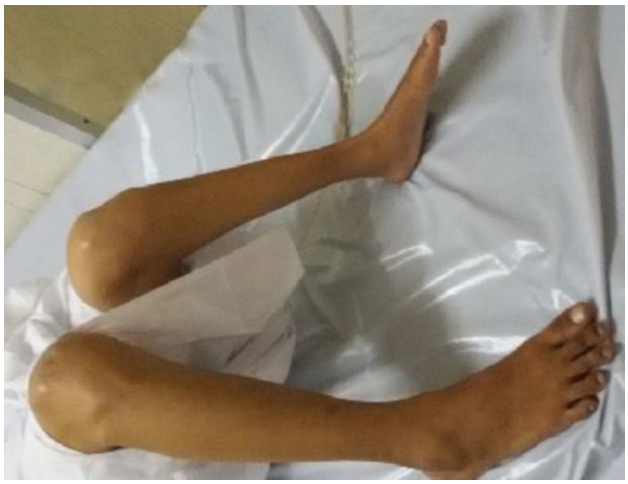

Fig. 1 Rocker bottom foot

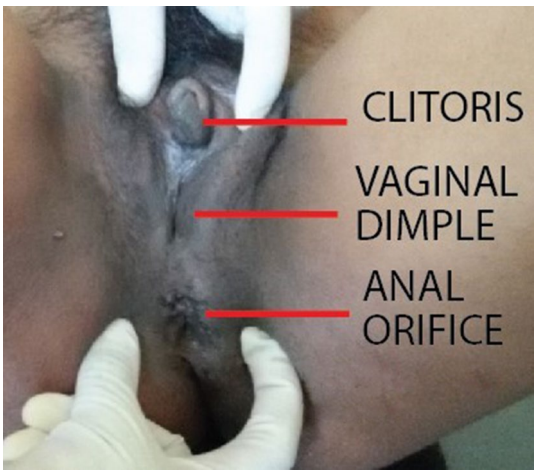

Fig. 2 External genitalia

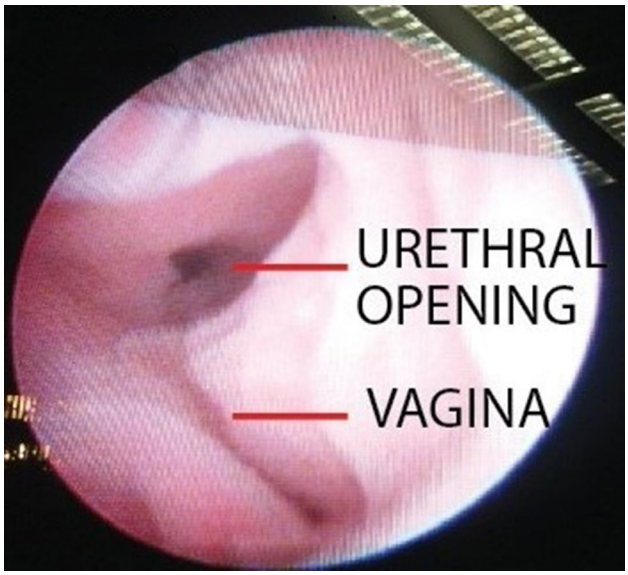

Fig. 3 Cystoscopy

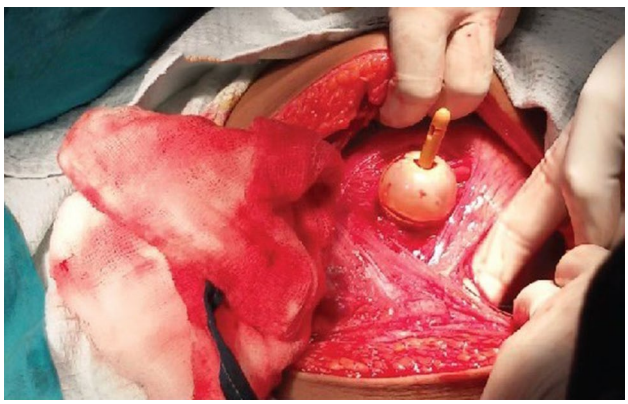

Fig. 4 Bladder rent

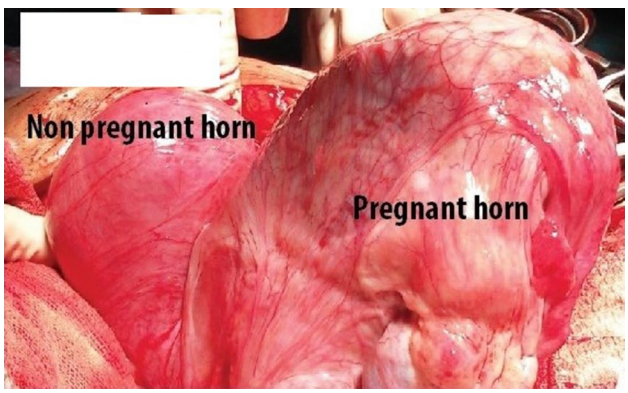

Fig. 5 Uterus didelphys

catheter was removed after 2 weeks and SPC after 3 weeks with normal voiding. Otherwise, post-operative period was uneventful.

Discussion

Cloacal anomaly is a complex problem, best dealt at a specialist centre and needs a team work [2].

The aim of definitive reconstruction is to create three separate channels. Although corrected in neonatal life, if not followed up, it can pose challenges during obstetric carrier. Due to stricture formation in created openings, there can be cryptomenorrhoea, difficult coitus or difficulty in defecation [3]. Due to associated uterine anomalies, there are chances of development of hematometra, endometriosis, early miscarriage, preterm labour, malpresentation and rupture uterus

[4]. The mode of delivery in such cases would be by caesarean section with high chance of bowel and bladder injuries due to altered pelvic anatomy.

A study by Hendren et al. [5] of 195 women with corrected cloacal anomalies reached adulthood, 17 experienced coital difficulties and 7 delivered by caesarean section except one who had vaginal birth.

Conclusions

Our case is unique as patient conceived in spite of coital difficulties and reached term gestation without any complications. Due to distorted anatomy, patient needed catheterisation under cystoscopic guidance and had a per-operative bladder injury which was repaired and healed without any sequelae.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Consent for Publication Written consent has been obtained for reporting the case, and care has been taken not to divulge any identifying information.

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