Case Report

Vesicocervical Fistula: An Uncommon Presentation

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Introduction

Vesicocervial fistula is a disease that is rare in developed world but still prevailing in developing countries. It is mostly due to a result of obstetrical cause, sometimes a gynaecological operation may lead to the condition.[1,2] This study reports our experience of such a case. This consequence of child delivery, secondary to a lesion in the bladder, was followed with a distressing, long-lasting urinary incontinence non-reactive to conservative treatment. Here, the case details, clinical features, possible reasons and treatment modality are discussed.

Case Report

Mrs. Jobaida is a 44 year old woman, para 4+0, 2 living; hailing from Narayanpur, Bhairav, presented in Ad-din Hospital with urinary incontinence for 22 years, since her last twin birth. She is married for 30 years. Her first and second children were delivered at home by vaginal route. The second child died at the age of its 5 months due to diarrhoea. Her next pregnancy was twin and the both of the twins presented as breech which were delivered by vaginal route with the help of a traditional Dai. The first of the twins delivered at midnight as a still birth followed by the later twin who was delivered almost 17-18 hours later, at afternoon; also a stillbirth. She experienced with the symptoms of continuous urinary leakage and dribbling of urine from that period of time. Her last childbirth took place by normal vaginal route at home of Bhairav 20 years ago without any difficulty. As she did not know that the condition she is having has any cure or treatment, she never seek for any medical attention then.

After hearing the treatment facility of the problem is available at Ad-din Hospital from a rural neighbourhood, she got herself admitted on April 05, 2010. On examination, her general condition was good, and she had frank leakage of urine through the vagina. She is non-asthmatic, non-hypertensive and non-diabetic.

The dye test was done on May 06, 2010 revealed that the urine was exiting through the cervical canal and an old big tear was found on anterior wall of the cervix and vagina through which the dye came out. Intravenous urography performed later showing normal study. She was diagnosed as a case of vesico-cervical fistula. She received antibiotic Tablet Cefuroxime 500 mg for the treatment of urinary tract infection, tablet Vitamin-B complex and Vitamin-C, Tablet Iron and Anti-helminthic drug prior operation.

Necessary preoperative assessments were done, including ultrasonography of whole abdomen and Injection Tetanus Toxoid. She underwent an operation of Total Abdominal Hysterectomy with repair of Bladder on April 21, 2010.

Operation Procedure

With all asceptic precaution, the abdomen was opened. Total hysterectomy was done after retraction of the urinary bladder. The bladder was repaired in three layers using 3-0 vicryl sutures on the inner layer in a continuous fashion, beginning at the apex and extending through the full muscle layers. The bladder was imbricated with a second layer using interrupted 1-0 vicryl sutures. Transabdominal ureteral and urethral catheterizations were performed.

The postoperative period was uneventful. She was treated with Infusion Hartmann's Solution and 5% DNS, Injection Ciprofloxacin 500 mg, Injection Metronidazole 400 mg, Injection Pethedine, Injection Ranitidin and Injection Prochlorcerazine for three (3) days. From 4th POD, the antibiotic drugs were given orally with Tablet Nitrofurantoin 100 mg, Vitamin-C, Calcium, Tiemonium and Benzodiazepum, and Syrup Lactulose. The ureteric catheter was removed on 7th POD and the per-urethral catheter was removed on 21st POD. The patient was discharged on 24th POD.

Discussion

Urinary incontinence is a common health problem among middle-aged women.[1,3] In contrast, vesicercial fistula is an extremely uncommon complication occurring only in l-4% of all urogenital fistulas, which are seen in only 0.1-l.5% after gynecologic operations,[3] but it is still frequently found in developing countries.[4] A vesicovaginal fistula or vesicocervical fistula causes mental and physical distress to a patient very often resulting in her being a social outcast. Surgery has so far been the gold standard of

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treatment for this condition but there is a failure rate also.[3] Most vesicervical fistulas are complications of caesarean section with symptoms of urinary incontinence.[3,5,6] Other possible causes include rupture of the lower uterine segment and bladder due to a traumatic forceps delivery, tuberculosis of the bladder and a perforation of an intrauterine contraceptive device into the bladder.[1,3] Primary aetiology to the fistula in this presented case was an inadvertent iatrogenic laceration to the cervix including bladder. The obstructed labour Zobaida had during the twin birth causes big tear necrosis of the vagina and bladder wall and also surrounding the tear region. The dead cells and vessels were sloughed out with the period of time due to necrosis leading to the bigger size of communicating fistula.

The presentation of a vesicouterine or vesicocervical fistula would largely depend on its location which may be above or below the isthmus of the uterus. This is because of a functional sphincter at the isthmus as demonstrated by Westman and Youssef in mid-twentieth centuries through trans-abdominal, intra-uterine insufflation and manometric hysterography procedures.[7] Transabdominal repair of the fistula is recommended in such conditions, but the procedure is done comparatively less than the vaginal route repair.[8,9] Atypical presentation of more fibrosis and distortion of such fistulas may considerably delay the diagnosis. In contrast to vesicovaginal fistula, conservative management may be tried in selected cases.[10] Our case of distressing vesicocervical fistula was successfully repaired and the patient was discharged.

Conclusion

In their work describing the complications of obstructed labor, Arrowsmith, Hamlin, and Wall drew attention to that "obstructed labor is one of the greatest unaddressed healthcare needs for the women of this planet. It should not be allowed to remain so."[11] One must realize the historical context of the obstetric fistula and the societal difficulties surrounding the prevailing problem, and the surgical principles that govern fistula repair. Successful closure of vesicicervical fistula requires accurate diagnostic evaluation, appropriate repair using techniques that utilize basic surgical principles, and the careful application of interposing tissue flaps. With a better understanding of the issue along with experience, we can begin to combat the problem and work to improve the healthcare status of women around the world. In this case, abdominal hysterectomy was done due to surrounding area of the tear is distorted and fibrosed and the patient was already amenorrheic due to repeated infection.

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