# Vesicovaginal Fistula Repair During Pregnancy: A Case Report

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# Abstract

We report a repair of Vesicovaginal fistula during pregnancy that was aimed at preventing another spontaneous abortion in the patient. Mrs. A A had 3 consecutive miscarriages after acquiring a Vesicovaginal fistula following obstructed labour, which was relieved by assisted vaginal delivery about 10 years ago. Pelvic examination revealed a mid - vaginal fistula. Pregnancy was confirmed by ultrasound. She had examination under anaesthesia (EUA) and repair, under spinal anaesthesia. The repair was done by the flap technique using vicryl. Outcome of surgery was favorable which prevented another abortion. She had a successful elective caesarean section at 38 weeks of pregnancy.

Key Words: Vesicovaginal Fistula; Repair; Pregnancy.

## Introduction

Vesicovaginal fistula (VVF) is a subtype of female urogenital fistula (UGF). In this condition there is an abnormal communication between the bladder and the vagina that allows for the continuous involuntary leakage of urine into the vagina<sup>1,2</sup>. The true incidence of VVF varies from place to place. It has been estimated that 50,000 100,000 new cases occur yearly world wide, the vast majority in the developing countries Presently, it is estimated that there are over 400, 000 to 800, 000 patients leaving with the condition in Nigeria, with an estimated 20,000 new cases annually. At an international workshop on VVF held in Abuja Nigeria in 1998, it was stated that over 2 million women suffer from this condition, 200, 000 of them from Nigeria alone<sup>2</sup>. Most of these patients develop the illness at a tender age of less than 20 years, some as young as 12 years<sup>1,2</sup>. In the developing countries, obstructed labour is the leading cause of VVF accounting for 75-100% of cases<sup>4,5,6</sup>. Other causes are surgical trauma, Gishiri cut, infection, carcinoma of the cervix, and irradiation necrosis from treatment of cervical carcinoma.

In Northern Nigeria where the condition is very common, risk factors include traditional and cultural practices that encourage teenage marriage and girl child pregnancy. Teenage girls get pregnant before they attain their maximum growth, thus exposing them to difficult labour and obstetric fistulae.

Controversy exists among experts concerning the timing of fistula repair. Late repair refers to waiting for 12 week or more interval between acquiring the fistula and repair. Recently we have seen many reports of early repairs (Surgery done within 12 weeks of acquiring the fistula) with comparable results. Repair in pregnancy and the puerperium has been reported <sup>1,7</sup>. Those who are against repair during pregnancy argue that the pelvis is highly vascular during pregnancy and

bleeding may likely be a problem. Secondly VVF patients are usually under psychological stress, and pregnancy itself is a form of stress, subjecting such a patient to the stress of surgery may not be appropriate. However, those who advocate for repair in early pregnancy argue that dissecting the tissue around the fistula is much easier in pregnancy compared to those in the non-pregnant state, this they attributed to the hormonal changes in pregnancy. The aim of this paper therefore is to report a successful repair in early pregnancy. It would also be interesting to note that our objective of management in this patient was aimed at preventing another abortion associated with the condition.

## **Case Report**

Mrs. A.A was a 21 year old P 1+ 3. Not alive. She presented at the Gynaecological out patient department of the Federal Medical Centre Gombe with a history of uncontrolled leakage of urine of 10 years duration. Her symptoms started 5 days after delivery of her first baby by assisted vaginal delivery following a prolonged and difficult labour. She has had 3 consecutive miscarriages at 9, 12 and 10 weeks, respectively after her unfortunate tragedy. At presentation she was 8 weeks pregnant, which was confirmed by ultrasound that also revealed normal abdominal and pelvic organs. A pelvic examination revealed mid vaginal fistula measuring about 2 cm. Renal function tests were within normal. She was planned, for and had examination under anaesthesia (EUA) and repair, under spinal anaesthesia. The repair was done by the flap technique using vicryl No 1.0 (with inverting the edges of the bladder tissue and to everting the edges of

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the vaginal skin). An indwelling Foley's catheter was inserted into the bladder and left in place for 14 days post operatively. Her post operative recovery was smooth. Mrs. A.A had full control over continence after removal of the catheter. She was discharged to the antenatal clinic for care. Pregnancy progressed normally to 38 weeks when she was delivered by elective caesarean section.

### Discussion

We report a successful repair of vesicovaginal fistula in early pregnancy. Others have reported similar repair with excellent results<sup>1,7.</sup> Our reason for attempting repair during pregnancy was to prevent another miscarriage resulting from this condition (VVF). Khunda and Khunda in 2003 at Baghdad Teaching Hospital performed their repair in early pregnancy and by so doing prevented a third miscarriage occurring in a 26 years old lady who had aborted twice prior to their repair. Mrs. A A had 3 consecutive abortions after acquiring the fistula and an early repair at 8 weeks gestation prevented a fourth abortion.

Examination under anaesthesia recommended by many surgeons as a separate standard operative procedure was done just before the surgical procedure itself in this patient. This was done to avoid unnecessary delay in treatment and also to reduce additional cost to the patient and the health facility. The authors found combining EUA and repair as advocated by Waaldijk and his coworkers in Kano/ Katsina, Northern Nigeria very useful for our environment<sup>1</sup>. In agreement with other reports we found dissecting the tissue around the fistula much easier in pregnancy compared to those in the non pregnant, this has been attributed to the hormonal changes in pregnancy. It is in this regard that the authors are presently investigating whether fistula patients could benefit from exogenous hormonal therapy weeks before and weeks after repair of genito-urinary fistula.

This patient presented to us 10 years after acquiring the fistula and principally because of the 3 consecutive miscarriages she had after acquiring the condition. In this country the average time of presentation has been reported to be over 5 years. This has been attributed to poverty, illiteracy, ignorance and the inadequate access to heath facilities that characterized our health care system  $^{7}$ .

Obstetric fistula can always be prevented. The strategies for prevention include the provision of basic essential obstetric care, improving the status of women and the girl child, access to basic formal education with out discrimination, family planning services, using the partograph at primary level of care and referrals for skilled obstetric care when and where necessary <sup>1, 3, 7</sup>. Delaying marriage, and first birth are sound pieces of advice that would help reduce risk. This is achievable when females are allowed equal exposure to education with their male counterparts.

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