Pregnancy after Obstetric Fistula: Should It Be Encouraged?

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ABSTRACT

Obstetric fistula (OF) is a life-changing morbidity associated with childbirth. It occurs especially after a prolonged obstructed labor and is a major public health problem in the developing countries. The smell of stool and urine leads to the ostracization and rejection of fistula patients by their spouses, families, friends and society in whole. Surgical treatment of fistula is possible. However, this successful outcome of fistula repair surgery is dependent on pre-operative care and the post-operative care such as delaying the commencement of sexual intercourse and delaying conception. Family planning can aid to this. Pregnancy is advised after minimum of 12 months' post-repair and mode of delivery should be elective cesarean section. Here, we present a case of 23 years' female, who suffered from obstetric fistula who underwent obstetric fistula repair twice, re-married and conceived after a year with successful elective cesarean delivery.

Keywords: cesarean section, obstetric fistula, pregnancy after fistula.

INTRODUCTION

Obstetric fistula (OF) is a serious birth injury that causes constant leakage of urine in a vesicovaginal fistula (VVF), stool in a rectovaginal fistula (RVF) or both that occurs most frequently in low resource countries. It is caused during childbirth by prolonged or obstructed labor. It may also be caused by trauma with forceps and other instruments used for delivery of stillborn infants and surgical abortion. The World Health Organization estimates that between 50000 to 100000 women worldwide develop obstetric fistula each year.[1] According to a 2011 Needs Assessment Report by UNFPA, around 4,300 women in Nepal are living with this condition.[2] Women with OF not only suffer from other physical impediments but also psychologically and socially with divorce, isolation or rejection by relatives and community. In many countries where fistula incidence is high, becoming a mother is an important component of fulfilling social roles. Pregnancy and childbirth after OF repair are an emerging concern because repaired women remain at high risk of developing recurrence of fistula or a complication during pregnancy and childbirth.[3] Here we present a case of patient with OF who underwent OF repair twice, conceived and delivered successfully through elective cesarean section.

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CASE

This is a case of 23 years' female, seen at our outpatient department with complaint of involuntary continuous leakage of urine for 5 years. This started after an obstructed labor of 5 days with stillbirth. Physical examination with intravesical methylene blue instillation revealed an approximate 2 cm fistulous defect 3 cm away from external urethral orifice (EUO) with moderate scarring (Goh 2bii). After anesthetic evaluation, she was planned for operative management under spinal anesthesia. Intraoperatively, excision of the scar was done with adequate exposure and bladder was mobilized. A tension free closure was done in single layer with interrupted suture. Dye test at the end of repair was negative and a 16 F Foley catheter was placed. Patient had an uneventful postoperative recovery. On 19 post-operative day, Foley's catheter was removed after a negative dye test.

Patient followed up with broken fistula after 2 months of repair. She was planned for re-repair but she lost to follow up. She followed up after 11 months. Examination done with intravesical methylene blue revealed a 0.5 cm fistulous opening 3 cm away from EUO (Goh 2aiii). Patient was planned for re-repair after anesthetic evaluation and a re-repair was

conducted with negative dye test at the end of the procedure. A 16 F Foley catheter was continued for 2 weeks. Dye test done at the end of 2 weeks was negative. Foley catheter was removed and patient was discharged dry again.

She was emotionally challenged by her family members and abandoned. But after she was dry, she was welcomed back to the society, got remarried and planned pregnancy after a year. She was educated and counselled for regular antenatal checkup. She underwent elective cesarean section at 39 weeks of gestation giving birth to a 3.4 kg baby boy with APGAR score of 7/10, 8/10. Her post-operative period was uneventful. She is dry till date.

DISCUSSION

Following prolonged and obstructed labor, the soft tissue crushed against impacted head and bony pelvis become necrotic due to lack of blood supply, causing an abnormal opening i.e. fistula to form between the vagina and the bladder and/or rectum. A successful closure of fistula is achievable. After successful fistula repair, women of reproductive age return to the community with the hope of resuming social roles and conceive again, generally to compensate for the traumatic loss experienced during the delivery that led to the fistula. Dr. Coetze recognized in his treatment of fistula patients 50 years ago, "For a 100% cure of a patient with VVF, the following conditions must be fully satisfied: the patient should be continent; no stress incontinence should be present; dyspareunia should not occur; traumatic amenorrhea should not occur; and the patient should be able to bear children". Although the primary goal of fistula repair is continence, for many women, a return of reproductive capacity is essential to successful reintegrate into their community after the surgery.4 Therefore, understanding the fertility outcomes and addressing the needs after repair is important in women who have undergone an OF repair.

The majority of women are concerned that an additional pregnancy can lead to fistula recurrence and the other half desire to have another pregnancy.[1] Wilson et al,[5] reported that women repaired for genital fistula frequently complained of infertility. It is stated that women with a previous traumatic birth experience had fewer pregnancies post-repair than women without such an experience. Women treated for OF are usually advised to wait for 3–6 months before resuming sexual activities.[1] The low pregnancy rate can be related to infrequent sexual activity, fear of fistula recurrence, lack of partner following hospital discharge, intrauterine scarring, upper urinary tract infection, vaginal stenosis, ovulatory disorder and amenorrhea.

In a study conducted by Kopp et al,4 of women 1–2 years after OF repair, 45% of these women desired to have additional children. However, 10% of women did not desire fertility and were interested in accessing long term and permanent methods of family planning. The pregnancy rate was 20% and among this 20% of total OF patients, 40% conceived within a year. In conclusion, 68% of OF patients were able to undergo elective cesarean section and remaining had vaginal delivery and 18% were reported to have recurrence of fistula after vaginal delivery.

In a study conducted by Delamou et al,[3] of 463 OF patients, 45.3% delivered by elective caesarean section (CS), 38.4% were by emergency CS and 16.3% by vaginal delivery. The most common maternal complications were the recurrence of a fistula in 5.0% cases undergoing vaginal delivery. Overall, the proportion of stillbirths across studies was 7.6%, out of which majority were associated with a vaginal delivery followed by emergency CS.

A review in sub-Saharan Africa found that the risk of adverse maternal and neonatal health outcomes was elevated in women after fistula surgery, and that postsurgical fistula recurrence was the most common maternal complication, occurring in 5% of deliveries.5 The three largest published series of pregnancies after OF repair reported perinatal mortality proportions of 17–37%.[4]

Pregnant women after repair of OF are of high risk and associated with childbirth complications. The mode of delivery is an important determinant of pregnancy outcomes. Stillbirths, recurrence of the fistula or even maternal death were more likely to occur with vaginal delivery and emergency cesarean section than with a scheduled cesarean section. Most of the studies have identified elective CS as the main mode of delivery resulting in a better maternal and neonatal outcome of pregnancies after successful repair of an obstetric fistula. The common factors like delay in seeking care or refusal to deliver with skilled birth attendants, no use of antenatal care contribute to delay delivery at a hospital. Vaginal delivery without medical assistance and emergency cesarean sections are listed as the factors increasing the risk of recurrence of a fistula

post-repair.3 In a study by Uchendu et al,6 almost two-thirds (63.8%) were willing to use family planning to delay pregnancy. To promote optimal healing and prevent fistula recurrence, women should be typically counseled to wait at least 12 months after fistula repair to conceive and then have a scheduled cesarean delivery for all future pregnancies to minimize fistula recurrence and poor obstetric outcome.[4]

CONCLUSIONS

Loss of a child during the delivery associated with fistula is a traumatic experience and a repeated infant loss after repair is even more of a human and public health tragedy. Pregnancy can be achieved in OF patients with proper counselling, education and guide. Resuming sexual activities after 3-6 months of repair, using family planning methods to delay pregnancy, planning pregnancy at a minimum of 12 months' post repair and undergoing elective cesarean section as a mode of delivery is the key to success in prevention of recurrence.

CONFLICT OF INTEREST

None

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