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CASE REPORT

Post B-Lynch Uterine Rupture: Case Report and Review of Literature

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Introduction

Postpartum hemorrhage (PPH) remains one of the three leading causes of maternal death and uterine atony accounts for 75–90 % of primary PPH. Apart from traditional conservative methods such as medical therapy, tamponades, the B-Lynch surgical technique has been widely used around the world. In 1997, Christopher B. Lynch devised these mechanical uterine compressing sutures to avoid hysterectomy in cases of severe PPH due to uterine atony, and since then, anecdotal evidence suggests that around 1,300 cases have been performed successfully worldwide including in India, Africa, North and South America, and Europe (Figs. 1, 2).

Case Report

A 23-year $G_4P_1L_1A_2$ was admitted from casualty on November 5, 2011 with 4 months of amenorrhea and pain in the abdomen since the morning. She was very pale, had tachycardia, and a BP of 90/60 mmHg. There was abdominal tenderness and guarding. There was also a suprapubic transverse scar of a previous surgery. The uterine size could not be assessed due to extreme tenderness and guarding. At the time of the previous normal delivery, the patient had atonic PPH for which B-Lynch suturing was done. The suture material used for B-Lynch was Polyglactin No 1 (delayed absorbable suture material) on round body needle. The ultrasound showed moderate free fluid in the abdomen, the fetus lying outside the uterine cavity, and a 7 × 7 cm retro placental hemorrhage -s/o uterine rupture. Under general anesthesia, an exploratory laparotomy was performed. The uterine rupture was approximately 6 cm in length at the fundal region. The fetus with the amniotic sac lying out of ruptured site and around 1,500 ml of hemoperitoneum. The uterus was sutured with delayed absorbable sutures in three layers. Peritoneal lavage was given and an intraperitoneal drain was kept. The uterine height was marked and monitored postoperatively. She received five units of whole blood, fresh frozen plasma, and platelets intra- and postoperatively. The postoperative course was uneventful and she was discharged on seventh postoperative day. The risk of uterine rupture in future pregnancy was explained to the patient and her relatives.

Discussion

In spite of an extensive search and web surfing, we could get only one case of antenatal uterine rupture at 32 weeks (third trimester) of gestation [1], but there was no similar case of post B-Lynch uterine rupture in the first or second

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Fig. 1 Ruptured uterus

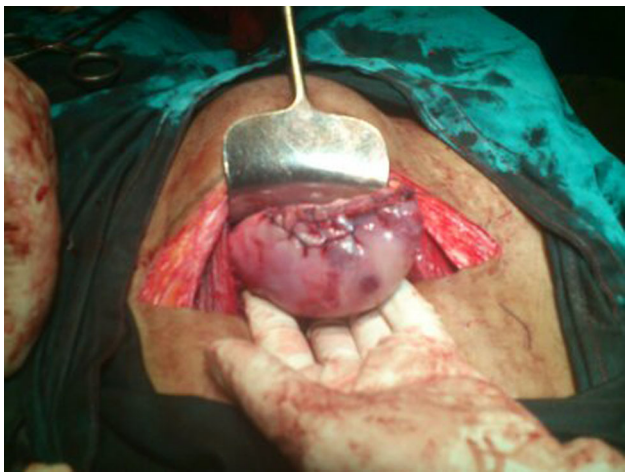

Fig. 2 Sutured uterus

trimester reported in the literature. B-Lynch suturing is an established technique of managing the atonic PPH along with preserving fertility. In the B-Lynch original case series of five patients, the procedure was successful in preserving the uterus and hence future fertility in all five cases, and there was no known immediate or long-term complication. There are no large studies explaining the complications of this technique in the literature. However, there was a case record of partial ischemic necrosis [2] of the uterus occurring 24 h after the procedure due to coagulopathy as an early complication and also a documented case report of erosion of B-Lynch sutures through the uterine wall where delayed absorbable sutures were used [3]. Even though an exact cause for the uterine rupture in our case could not be commented upon, ischemic necrosis or erosion of the suture leading to weakening of the myometrium and uterine rupture can be postulated as the probable etiology. Though used for fertility preservation, it has been shown to develop Asherman syndrome and secondary infertility. Our case report of post B-Lynch uterine rupture in the early second trimester will definitely add to the likely long-term complication of this procedure even though we were successful in preserving the uterus and fertility.

References

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