

Cornual Placenta Accreta Managed with Mini Modified B-Lynch Suture Technique

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ABSTRACT Placenta accreta represents abnormal, firmly adherent placental implantation with invasion into the uterine wall. The consequence of partial or complete absence of decidua basalis and defective formation of the Nitabuch (fibrinoid) layer are considered in the pathogenesis. A 35-year-old woman attended our emergency clinic, having been diagnosed with preterm premature rupture of the membranes at 23 weeks' gestation. She was delivered by cesarean section at 26 weeks' gestation. During caesarean section, it was determined that the placenta was located in the right cornual region of the uterus and adhered there with the appearance of placenta accreta. The patient was treated with mini-modified B-Lynch suture.

Keywords: Placenta accreta; suture techniques

Placenta accreta is much more common than placenta increta and percreta.¹ The rate of placenta accreta increases in conjunction with cesarean deliveries.² The overall incidence of placenta accreta is around 3 per 1000 deliveries, and there has been a considerable increase in the incidence of placenta accreta over the past few decades.³ About 75% of morbidly adherent placentas are placenta accretas; 18% are placenta incretas; and 7% of them are placenta percretas.⁴ The complications of placenta accreta are numerous and include damage to local organs, post-operative bleeding, infectious morbidities, multisystem organ failure, and maternal death.⁵

CASE REPORT

A 35-year-old woman attended our emergency clinic, presenting with preterm premature rupture of the membranes at 23 weeks' gestation of her second pregnancy. Her first pregnancy was delivered by cesarean section three years ago. The patient did not have any additional disease or any problem in index pregnancy until the 23rd week gestational age. Ultrasonographic examination at admission revealed a single fetus, amniotic fluid index of 50 mm, placenta located in the right side of the uterus. The patient underwent a cesarean section because of transverse situs and anhydramnios. Informed consent was taken prior to cesarean section. During caesarean section the right cornual uterine vasculature was found to be increased and in this region the vessels were observed to have completely invaded the myometrium.

The right cornual region was observed to have visibly grown and broadly distended vascular packs were bulging to the outside of the uterine wall. The relatives of the patient informed during the operation. Active bleeding was observed from the region where the placenta stuck and a hematoma area was present behind the placenta. The region of cornual accreta was passed to the inside from the outside of the uterus and then the outside to the inside of the uterus using two individual sutures with 1/0 vicryl, and nodes were left in the interior of the uterus (Figure 1). No active bleeding area was then observed, two drains were placed into the abdomen, foley catheter was into the uterus and the operation was ended. The patient was given 4 units of Packed Red Blood Cell and 2 units of Fresh Frozen Plasma in the intraoperative periods.

The patient's uterine tone was good in the postoperative period and there was no active vaginal bleeding. The drains were taken out on the second postoperative day and the patient was discharged on the third postoperative day from the intensive care unit. She was discharged postoperative 10th day from hospital. The patient was invited for hysteroscopic examination three months later. Office hysteroscopy clearly revealed right and left tubal ostia, and there was a minimal uterine kurtosis in the right cornual region. Hysterosalpin-gography showed the crossing of the contrast smoothly from both uterine tubes (Figure 2). Informed consent was taken to using the whole in-

formation about image of operation, ultrasound and hysteroscopy from patient.

DISCUSSION

Placenta accreta, defined as an abnormal attachment of the placenta to the uterine wall. Its occurrence worldwide has increased 10-fold during the past 50 yr with an incidence of 3 per every 1000 pregnancies in the last decade.^{3,6} Placenta accreta is associated with significant morbidity and mortality. It leads to postpartum hemorrhage, which commonly requires blood transfusion and, when life threatening, emergency hysterectomy. In fact, placenta accreta is now the leading cause of peripartum hysterectomy, ranging from 49% to 64% of all cases.^{6,7}

The incidence of placenta accreta has increased over recent decades and seems to be increasing in parallel with the increasing cesarean delivery rate.⁸ Placenta percreta is one of the most serious complications of placenta previa and is frequently associated with severe obstetric hemorrhage, usually necessitating hysterectomy. Generally, the recommended management of suspected placenta accreta is planned preterm cesarean hysterectomy with the placenta left in situ, because removal of the placenta is associated with significant hemorrhagic morbidity. However, this approach might not be considered the first-line choice of treatment for women who have a strong desire for future fertility. Therefore, surgical management of placenta accreta must

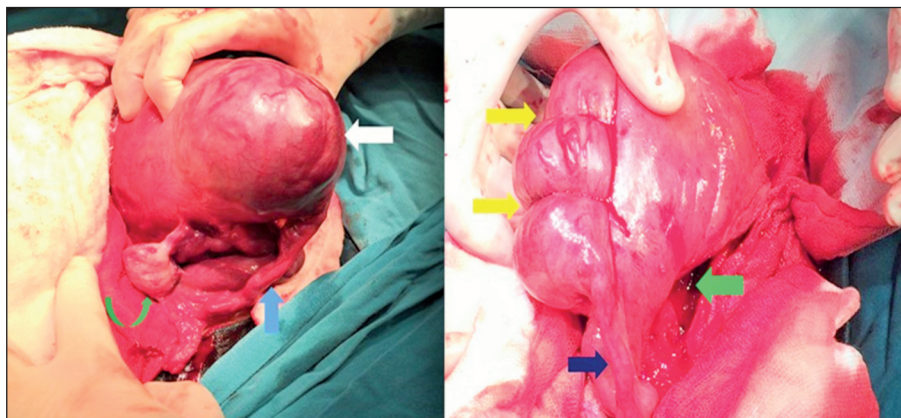


FIGURE 1: Intra-uterine accreta to right cornual region (white arrow), right fallopian tube (blue arrow), right ovary (green arrow). Modified B-Lynch appearance to postoperative periods (yellow arrow), right fallopian tube (blue arrow), lower segment transverse incision (green arrow).

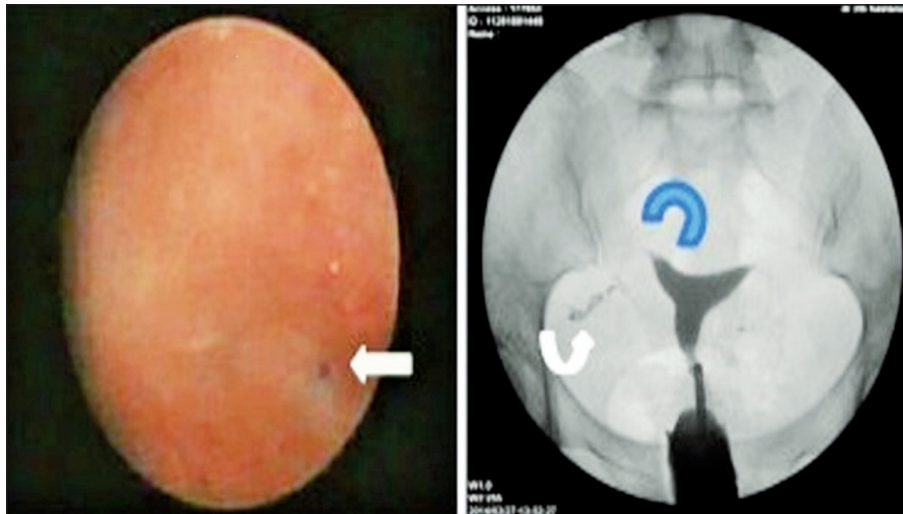


FIGURE 2: Postoperative right ostium view in office hysteroscopy after three months (white arrow). Both tubes were observed transition with postoperative hysterosalpingography (white arrow, right fallopian tube passes). There was a minimal kurtosis in the right cornual region (blue arrow).

be individualized. The suturing techniques have been found to be useful in controlling bleeding in cases of placenta previa and placenta accreta. It has been also used prophylactically in cases of morbidly adherent placenta.⁹ B-Lynch sutures are being used to arrest the bleeding from the upper as well as the lower uterine segment. In this case, B-Lynch brace suturing results in direct compression of the uterine walls above the segment of placenta accreta. In this case, two individual mini-modified B-Lynch sutures were applied to the right cornual region in such a way as to ensure the passage of the fallopian tube for fertility preservation. Thus, both the tubal passage was preserved and bleeding of the accreta area was controlled. The technique used was easy, less invasive and is more effective than other methods for the preservation of fertility. This method can be used in circumstances such as postpartum bleeding from atony, placenta accreta settled sub-segments or located atypical cases (cornual wall, side walls of the uterus), cornual ectopic pregnancy and cases in which obstetrical hemorrhages have indicated the need for surgical treatment. The method can be used for the preservation of fertility and uterine cavity volume. This method also may reduce the possibility of intrauterine adhesions (Asherman's Syndrome) that may occur in the uterus resulting from the original B-Lynch suturing tech-

nique.¹⁰ However, our study was a case report without a proper comparison group.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Sibel Özler, Efser Öztaş, Ali Özgür Ersoy, Orhan Aksakal, Nuri Danişman; **Design:** Sibel Özler; **Control/Supervision:** Orhan Aksakal, Nuri Danişman; **Data Collection and/or Processing:** Sibel Özler, Efser Öztaş, Ali Özgür Ersoy; **Analysis and/or Interpretation:** Sibel Özler, Efser Öztaş, Ali Özgür Ersoy; **Literature Review:** Sibel Özler, Efser Öztaş, Ali Özgür Ersoy, Orhan Aksakal, Nuri Danişman; **Writing the Article:** Sibel Özler, Efser Öztaş, Ali Özgür Ersoy, Orhan Aksakal, Nuri Danişman; **Critical Review:** Sibel Özler, Efser Öztaş, Ali Özgür Ersoy, Orhan Aksakal, Nuri Danişman; **References and Fundings:** Sibel Özler, Orhan Aksakal, Nuri Danişman; **Materials:** Sibel Özler, Efser Öztaş, Ali Özgür Ersoy, Orhan Aksakal, Nuri Danişman.

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