

CASE REPORT

A Unique Case of Nonradical Management of Retained Placenta Accreta

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ABSTRACT

Retained placenta is a serious cause of postpartum hemorrhage and maternal mortality. The optimal management of placenta accreta remains a topic of debate.

We report here a 37-year-old woman with previous two cesareans and two curettages, with postdelivery retained placenta accreta who was diagnosed properly and underwent successful conservative treatment with hysteroscopic resection, with conservation of uterus.

Placental tissue invasion at the scar site was diagnosed by ultrasound and MRI in a relatively asymptomatic patient. β -hCG value was on lower side and with a differential diagnosis of placental site trophoblastic tumor (PSTT). Hysteroscopic tissue biopsy was done and a ball of tissue approximately $6 \times 5 \times 5$ cm invading the previous cesarean scar was visualized. Biopsy report came out to be retained placental tissue. Hysteroscopic resection was done with laparoscopic guidance. Patient follow-up done with repeat ultrasound and β -hCG.

Keywords: Retained placenta accreta, Hysteroscopic resection, Nonradical endoscopy.

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INTRODUCTION

Placenta accreta is defined as the clinical condition when all or part of the placenta attaches abnormally to the myometrium secondary to a defect in deciduas basalis.¹ Incidence of placenta accreta is about 1/1000.² The incidence of retained placenta varies greatly around the world, affecting between 0.1 and 3.3% of vaginal deliveries depending on the population studied.³ Maternal

mortality is as high as 7%.⁴ Retained placenta accreta is a challenging obstetric problem. The traditional management has been hysterectomy, but different management options have been opined and tried that include methotrexate, uterine artery embolization, dilation and curettage and hysteroscopic loop resection. The optimal management remains a topic of debate. We report a case of retained placenta accreta who was diagnosed properly and underwent successful conservative treatment with hysteroscopic resection.

CASE REPORT

A 37 years old lady, P2L1A3, was referred to our hospital outdoor with a magnetic resonance imaging (MRI) report of retained placenta accreta. She had a bad obstetric history including two previous cesarean sections out of which one baby had expired. She had undergone one laparotomy for ectopic pregnancy. Then she had three spontaneous abortions all followed by curettages. After all these, she developed secondary infertility. She underwent hysteroscopic adhesiolysis on 2013. Finally on January 2014, she conceived spontaneously. This pregnancy was a twin one which when first diagnosed by ultrasonology at 7 weeks of gestational age, already showed a fetal demise of one twin. The lady was a booked case in some outside hospital but despite all antenatal care she expelled her second twin also at 18 weeks of gestational age. But this expulsion was incomplete requiring curettage. During the curettage procedure, patient developed some anesthetic complications. She went into vasovagal shock. So, the procedure remained incomplete. However the lady recovered soon, had bleeding for 3 to 4 days only, after that she was almost asymptomatic, only occasionally she used to have irregular per vaginal spotting, which she ignored. After 2 months, in July 2014, she had overdue of 4 days when she got anxious and went for ultrasound. The USG report incidentally came out to be retained placenta, suggestive of accreta, with a differential diagnosis of trophoblastic tumor. Patient was then advised for MRI scan which actually revealed invasion of placenta upto the serosa of bladder wall. The lady was taking all these treatments from some outside hospital where she was advised to undergo hysterectomy. But, she had only one live issue, so she wanted to preserve her fertility.

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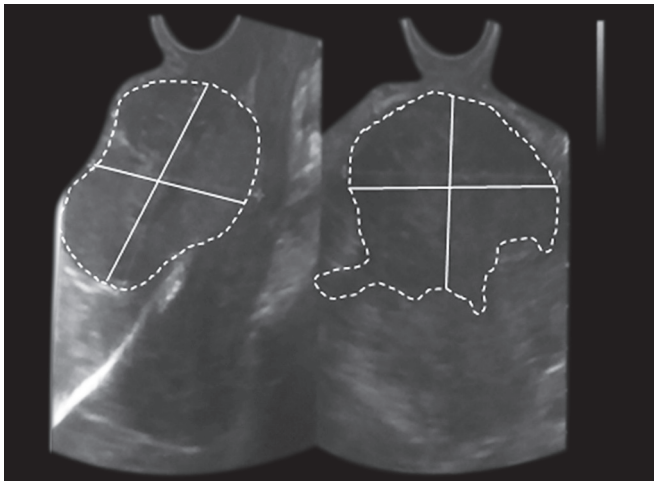


Fig. 1: Transvaginal USG report showing a well defined hypoechoic mass in anterior myometrium, measuring about 6.4 × 5 × 4.9 cm (81.7 cc). The retroplacental myometrial zone is hypoechoic and the area between the serosa of the bladder wall and the uterine wall is clear, without any hypervascularity, ruling out the possibility of placenta percreta

She was thus referred to our hospital for further management. We wanted to reconfirm the diagnosis, so advised her for a transvaginal ultrasound with color Doppler (Fig. 1). The report revealed a well-defined hypoechoic mass in anterior myometrium, measuring about 6.4 × 5 × 4.9 cm (81.7 cc). The retroplacental myometrial zone was hypoechoic and the area between the serosa of the bladder wall and the uterine wall was clear, without any hypervascularity, ruling out the possibility of placenta percreta.

Serum β-hCG was done and it was only 15 mIU/ml.

Now, we concluded that the possibility of molar pregnancy is almost ruled out. It can either be a retained placenta accreta or very rarely but possibly can be a placental site trophoblastic tumor (PSTT), keeping in view the lower range of β-hCG. To come to a conclusion, we decided to go for a hysteroscopic tissue biopsy. Placental tissue was seen almost filling whole of the cavity and appeared to come from anterior wall of uterus, from the previous scar area.

Biopsy report came out to be retained placental tissue. Then we planned the patient for hysteroscopic tissue removal under laparoscopic guidance. One injection of IM methotrexate was given during this period.

OPERATIVE PROCEDURE

All the preanesthetic checkups were done. Laparoscopy was done first. Dense omental adhesions were seen because of the previous cesarean sections, which were adhesiolysed. Bladder was adhered high up to the anterior wall of uterus which was carefully dissected and pushed down. In the lower segment area, an obvious bulge was seen which was because of the placental tissue

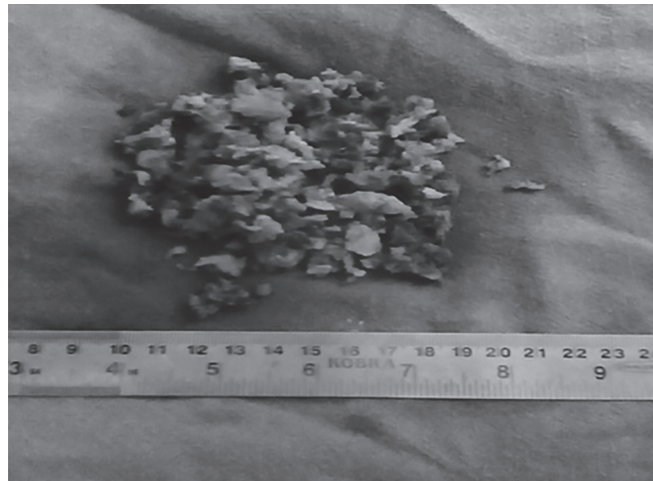


Fig. 2: All the scraped placental tissue material dried and collected, which measured about 6 × 5 × 5 cm

inside the uterus beneath the uterine wall scar area. The uterine wall surface was however smooth with no trophoblastic tissue penetration, again suggestive of no placenta percreta. So, we proceeded with hysteroscopic tissue resection on hysteroscopy, the placental mass size seemed to be almost the same as previously seen during the biopsy. Again this was a good sign, suggesting no possibility of trophoblastic tumor. Hysteroscopic resection was completed with resectoscope so that at the end of the procedure, the uterine cavity appeared almost empty. All the scraped placental tissue material was made into a dry ball in a gauze piece which measured about 6 × 5 × 5 cm (Fig. 2). Whole of the mass was sent for histopathology and the report came out suggestive of placenta accreta (Fig. 3).

FOLLOW-UP

Patient was discharged the next morning and called for follow-up after 14 days with repeat transvaginal ultrasound with Doppler and β-hCG report. The repeat USG (Fig. 4) showed a remaining mass in myometrial wall of only 9.3 cc volume, i.e. 10% volume of the previous mass. So, more than 90% reduction of placental mass was obtained by hysteroscopic resection only. The repeat serum β-hCG value was < 1 mIU/ml. One shot of injection methotrexate was given (1 mg/kg). Patient is now doing very well, and follow-up will be done by repeating ultrasound after 3 months.

DISCUSSION

The incidence of placenta accreta has been increasing largely due to the global increase in cesarean deliveries. Women at greatest risk of placenta accreta are those who have myometrial damage caused by a previous cesarean delivery with placenta previa overlying the uterine scar. Risk factors include previous cesarean sections,

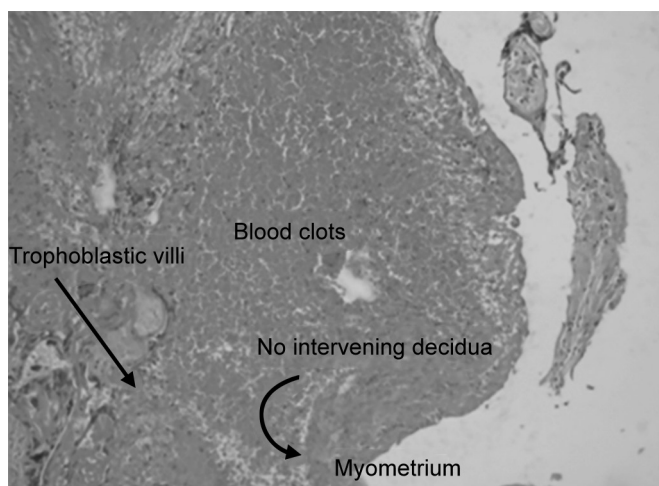


Fig. 3: Histopathology slide showing chorionic villi and myometrial fibers without intervening decidua; suggestive of placenta accreta

myomectomies, curettages, thermal ablation, etc. and also multiparity and increasing age.⁴

Grayscale ultrasonography is sensitive enough and specific enough for the diagnosis of placenta accreta.⁴ In our case, transvaginal sonography with Doppler proved to be the best imaging procedure correlating with the peroperative finding. Magnetic resonance imaging may be helpful in ambiguous cases.

Two strategies for the management of placenta accreta have been described: surgical removal of the uterus and conservative management. Traditionally, primary hysterectomy at the time of cesarean section has been the mainstay of therapy. The approach most often recommended is a cesarean-hysterectomy, with no attempt to detach the placenta.⁴ However, hysterectomy makes future childbearing impossible and is associated with significant morbidity.⁵

The optimal management of placenta accreta remains a topic of debate. The extirpative approach, consisting of forcible manual removal of the placenta, is associated with massive hemorrhage and emergency hysterectomy.¹ This scenario is encountered when placenta accreta is diagnosed peripartum following failed removal of a retained placenta. Therefore, this option should be abandoned when other options are available.¹

Several reports have described the use of more conservative strategies aimed at preserving the uterus and maintaining future fertility⁵ providing that the patient remains hemodynamically stable. Both methotrexate therapy and uterine artery embolization have been proposed in this context. However, both present a risk of infection and late bleeding. Moreover, neither of these strategies clearly improves maternal outcome.⁶

With methotrexate, many cases of failures have been reported where hysterectomy was later performed either for life-threatening hemorrhage or for the necrosis leading

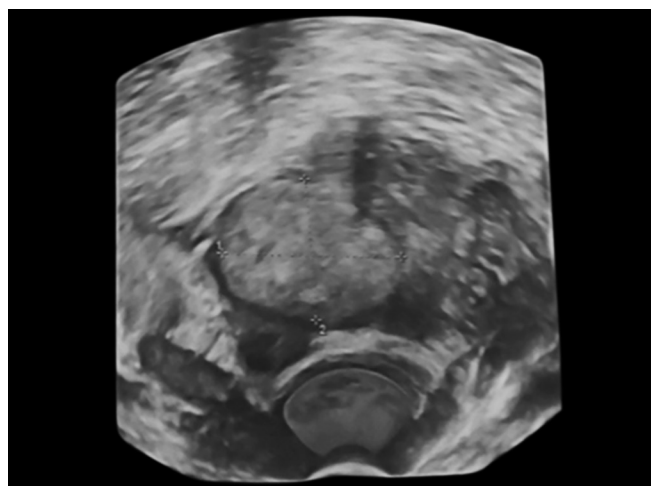


Fig. 4: Postoperative transvaginal ultrasound with Doppler showing a remaining mass in myometrial wall of only 9.3 cc volume, i.e. 10% volume of the previous mass

to infective sequel. It has been hypothesized that methotrexate acts by inducing placental necrosis and expediting a more rapid involution of the placenta.⁶ This contradicts the belief that methotrexate acts only on rapidly dividing cells, given that trophoblast proliferation is not felt to occur at term⁶ or after delivery. Thus, there is controversy as to the effectiveness of methotrexate in retained placenta accreta. Also, there is a lack of consensus regarding optimal dosing, frequency, or route of administration.

Though uterine artery embolization may be regarded as an alternative to surgery for control of obstetric hemorrhage in placenta accreta,⁶ its safety for women desiring future pregnancy is controversial.⁶ Important side effects are failure to control bleeding, thromboembolism and ischemic injury of lower limb if occlusion of iliac vessels occurs and unexpected embolization of non-targeted pelvic organs.⁶

Hysteroscopy is an innovative treatment in conservative management of placenta accretas. Hysteroscopic resection of retained tissue seems to prevent severe maternal outcomes, such as major sepsis.² The advantages of hysteroscopy are 2-fold.² First, diagnostic hysteroscopy can be performed as a first step to confirm the absence of a cleavage plane. Second, selective resection can be achieved by using a bipolar loop or resectoscope under permanent visual control. Hysteroscopy reduces the rate of synechiae via selective resection and improves the fertility prognosis.⁵

The level of placental invasion in the myometrium must be evaluated before performance of hysteroscopic resection. Transvaginal ultrasound or MRI can be useful in diagnosing retained placental tissues.² Complete elimination of the residual placenta is the main challenge in hysteroscopic placental resection. This approach allows conserving the uterus and future fertility.

Although one of the main reasons for choosing conservative treatment is the strong desire to remain fertile, little is known about fertility and pregnancy outcome in women who have undergone successful conservative management for placenta accreta.⁵ Hypothetically, conservative treatment might worsen the endometrial disease, due to more uterine scars, or clinical or sub-clinical uterine infection. However, according to one large multicenter study⁵ including women with a history of conservative management for placenta accreta in French university hospitals from 1993 through 2007, it was seen that successful conservative treatment for placenta accreta does not appear to compromise the patients' subsequent fertility or obstetrical outcome.⁵ Nevertheless, patients should be advised of the high risk that placenta accreta may recur during future pregnancies.

CONCLUSION

Hysteroscopic resection of retained placenta seems to be a safe and effective procedure to prevent major complications and to preserve fertility in cases of conservative management of placenta accretas. Whereas other methods have failed due to bleeding and/or infection, this case illustrates a potential new means of addressing this challenging obstetrical complication. Hysteroscopy

and laparoscopy in dual set up affords us options and is the gold standard for patient with placenta accreta who wants preservation of uterus.

REFERENCES

1. Hequet D, Morel O, Soyer P, Gayat E, Malartic C, Barranger E. Delayed hysteroscopic resection of retained tissues and uterine conservation after conservative treatment for placenta accreta. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2013;53:580-583.
2. Legendre G, Zoulovits FJ, Kinn J, Senthiles L, Fernandez H. Conservative Management of Placenta Accreta: Hysteroscopic Resection of Retained Tissues. *J Minimally Invasive Gynecology* 2014;21:910-913.
3. Obajimi GO, Roberts AO, Aimakhu CO, Bello FA, Layemi OO. An appraisal of retained placentae in Ibadan: a five year review. *Annals of Ibadan Postgraduate Medicine* 2009;7: 21-25.
4. American College of Obstetricians and Gynecologists. ACOG Committee Opinion no. 529: placenta accreta. 2012 July;120(1): 207-211.
5. Sentilhes L, Kayem G, Ambroselli C, Provansal M, Fernandez H, Perrotin F, Winer N, Pierre F, Benachi A, Dreyfus M, et al. Fertility and pregnancy outcomes following conservative treatment for placenta accreta. *Hum Reprod* 2010;25(11): 2803-2810.
6. Khan M, Sachdeva P, Arora R, Bhasin S. Conservative management of morbidly adherent placenta: a case report and review of literature. *Placenta* 2013;34:963-966.