



MANAGEMENT OF RETAINED PLACENTA BEYOND CONVENTIONAL METHODS - A CASE REPORT

Obstetrics & Gynaecology

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KEYWORDS

INTRODUCTION:

Retained placenta is a rare but potentially life-threatening complication of childbirth. It is one of the complications of the third stage of labour. The incidence of retained placenta is reported between 0.1%-3% (1). We reported a case of a 20-year-old woman who underwent an exploratory laparotomy for removal of retained placenta. An exploratory laparotomy was performed, and the retained placenta was successfully removed. The patient recovered uneventfully and was discharged on the 7th postoperative day. This case highlights the importance of timely management of retained placenta and the effectiveness of exploratory laparotomy as a surgical approach.

Case Report:

A 20-year-old, P2L1D1A1 PNC day 1 presented to the emergency room on 8th December 2024 at 8.40 pm as a case of retained placenta at GMCH Ch. Sambhajinagar. She had delivered at the Civil Hospital earlier on the same day at 7.20 pm but the placenta remained in situ for 45 minutes despite administration of uterotonics with no signs of placental separation. There was no PPH. The patient was then referred to our institute for further management. She had delivered a female child of weight 2.4 kg and APGAR 8.

The patient was admitted. She was a known case of hypothyroidism (on Thyroxine 100mcg). On examination, the patient was conscious well oriented, pulse of 130 bpm, blood pressure 114/78 mm of Hg, pallor 1+, and CVS & RS examination was within normal limits. Foley catheterization revealed a clear urine output of 100ml. Per abdominal examination revealed a uterus of 20-22 weeks in size, centrally placed, firm & non-tender. The placenta and cord were seen with active PV bleeding on local examination.



Clinical Photograph: per vaginal examination revealed an open cervical os with a cord coming out.

The diagnosis of retained placenta with active vaginal bleeding was made.

Urgent investigations CBC/LFT-KFT/PT INR/R BSL were sent and an emergency ultrasound was performed. USG revealed placental tissue at a fundal region with myometrial thinning likely s/o placental invasion. A provisional diagnosis of placenta accreta was made.



Transabdominal USG (M=myometrium, P=placenta, BL=bladder)

Meanwhile, the patient had received Inj. Ceftriaxone 1g iv in 100ml NS + Inj. Pantoprazole 40mg iv + inj. Ondansetron 4mg iv + Inj. oxytocin 20 I.U in 500ml NS + Inj. Carbetocin 100mcg + Inj. Tranexamic acid 1g in 100 ml NS + Misoprostol 800mcg per rectal. ICU bed, blood, and blood products were kept reserved.

After explaining the prognosis, a high-risk consent for massive blood transfusion, obstetric hysterectomy & management of complications was taken. The patient was then shifted to the OT for exploratory laparotomy. Under spinal anesthesia by a senior anaesthetist patient was operated on by a senior consultant by a Pfannenstiel incision, uterus was opened by transverse incision later converted to inverted T on LUS. E/O of the arcuate uterus with trapped placenta due to a subseptate uterus was found. The placenta was removed manually after cutting the septum. Septum sutured with Vicryl 2-0 round body. Haemostasis achieved. PPH prophylaxis was given. The uterus was tonically contracted. LUS was sutured with chromic catgut 1.0 Abdomen closed in layers after achieving hemostasis. No bleeding PV. The procedure was uneventful.

The post-operative patient was vitally stable. After being counseled about post-op care, nutrition, and contraception. The patient was discharged on day 7.





Intra op showing Arcuate Uterus Retained placenta taken out LUS sutured.



Post-op day 6 MRI Coronal T2W image depicts an arcuate uterus with endometrial indentation at the fundus.

DISCUSSION:

The incidence of arcuate uterus in the general population is reported around 3.9% (2). The various factors responsible for retained placenta are uterine anomalies, placental invasion, fibroids, endometriosis, prior uterine surgeries, etc. Obstetricians need to diagnose this condition at the earliest and treat it accordingly. Traditionally the treatment of retained placenta is manual removal of the placenta under general anesthesia but this method requires the presence of a senior obstetrician expertise which may not always be possible, especially during emergency duties in addition to this there is always a risk of adherent placenta like placenta accreta spectrum in these cases. Hence it is easy and safe to perform a laparotomy like a c-section which can be performed by junior obstetricians. The removal of the placenta is under vision. If there is evidence of bleeding, uterine artery ligation can be done in the same sitting. Thus, one can manage atonic PPH along with medical treatment effectively.

Several causes may lead to retained placenta. At one end of the spectrum is a trapped placenta due to closed cervical os and on other end is an adherent placenta. The placenta may be trapped due to congenital malformations as in our case. Various congenital mullerian anomalies like bicornuate uterus, unicornuate uterus, and arcuate uterus with subseptate (3).

The three types of retained placenta, in order of increasing morbidity, are:

- **Trapped Or Incarcerated Placenta** – The incarcerated or trapped placenta is simply a separated placenta that has detached completely from the uterus but has not delivered spontaneously or with light cord traction because the cervix has begun to close.
- **Placenta Adherens** – The placenta is adherent to the uterine wall, but easily separated manually.
- **Placenta Accreta Spectrum** – The placenta is pathologically invading the myometrium due to a defect in the decidua. It cannot be cleanly separated, although the placenta may still be removed vaginally if the area of attachment is small.

A diagnosis of placenta adherens or placenta accreta is made in the absence of signs and symptoms of placental separation. Placenta adherens are generally only clinically distinguishable from placenta accreta at the time of attempted manual removal.

If a clean plane of separation can be created between the entire placenta and decidua, the diagnosis is placenta adherens. If areas of myometrial invasion prevent the clean separation of part of the placenta, then the diagnosis is focal placenta accreta. However, a mild focal placenta accreta can be difficult to distinguish clinically from placenta adherens (4).

So, one must be prepared to handle such situations and be prepared. Consent for obstetric hysterectomy if required, ICU care, transfusion, and ventilatory support in cases of retained placenta must be taken.

The most common uterine anomaly is arcuate uterus incidence being 3.9% in mullerian anomaly (5). This is associated with preterm birth/abortions/retained placenta. Uterine abnormalities appear to be a prominent risk factor. In a series of 63 pregnancies in women with bicornuate, septate, or arcuate uteri, retained placenta was the predominant complication and occurred in 17 percent. In a study that performed routine hysteroscopy six weeks after manual removal of a retained placenta in 48 women, 15 percent had an incomplete uterine septum (4).

Conservative management using systemic methotrexate was done by Arul Kumaran in his article in 1986 (6). The concept was methotrexate would cause placental necrosis and rapid expulsion and involution of the postpartum uterus. The failure rate of methotrexate therapy in retained placenta varies but studies suggest that is not entirely effective with this method. Sentilhis et al. reviewed conservative management in 167 cases of placenta accreta / percreta. The failure rate of conservative management was 22% which required a hysterectomy, either primary or delayed, mostly for severe hemorrhage (7). We opted for removing the placenta via exploratory laparotomy.

The Advantages Of This Method Are:

- Can be done by a junior doctor as LSCS is a common procedure and every obstetrician knows it.
- Uterine artery can be ligated.
- Placenta removed under vision advantage is that there will be no placenta bits which may lead to postpartum haemorrhage.
- Safe and effective with negligible failure rate.
- If the placenta is adherent, then an obstetric hysterectomy can be done in the same sitting without wasting time.

Though this method of retained placenta was successful without any complications there is a need to have studies with adequate sample size before making this a preferred choice of management.

CONCLUSION:

Retained placenta can occur without any identifiable risk factors in the antepartum period. It can cause fatal postpartum haemorrhage which may require lifesaving hysterectomy. Careful history-taking, physical examination, and clinical judgment should be taken into consideration when suspecting and diagnosing retained placenta.

In conclusion, this case highlights that retained placenta is a serious obstetric complication that can cause life-threatening postpartum hemorrhage.

Although perceived as low risk during pregnancy a continuous awareness of having adverse events should be present in the obstetrician's mind. Transitions from low risk to high risk can be shifted and sentinel events can occur. Retained placenta can be one of these events. Expert obstetric anesthesia, ICU backup, availability of blood and blood products, and successful management can be lifesaving.

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