



Proceeding of
Symposium of Invasive & Adherent Placenta

S.I.A.P. II

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Dear Colleagues,

The Maternal Fetal Medicine Division of Dr Soetomo General Hospital – School of Medicine Airlangga University invites you to participate in the Symposium of Invasive & Adherent Placenta 2017, scheduled to take place in Surabaya, Indonesia, from November 18 to November 20 2017.

The unique and important topic of morbidly adherent placenta will undoubtedly attract hundred of delegates from East Java and Indonesia and allows us to anticipate a successful Congress with over 250 participant expected. The symposium will be held at the Fairfield Hotel, Surabaya which over good facilities and efficiently connected to the city malls and airport.

The scientific programme will cover cutting edge topics in daily practice with special guest speaker Prof. Jose M Palacios-Jaraquemada (world expert in morbidly adherent placenta).

Hopefully this symposium will make a differences in management of morbidly adherent placenta and intern will save hundreds of life.

Warm wishes

Hermanto TJ





Assalamualaikum Wr Wb

Placenta Akreta adalah kelainan implantasi placenta dengan komplikasi luar biasa. Morbiditas dan bahkan mortalitas menjadi ancaman nyata pada kasus placenta akreta.

Seiring dengan naiknya SC rate, maka placenta akreta menjadi sesuatu yang akan “dipanen” pada masanya. Lalu bagaimana kita harus bersikap? Bagaimana kita bisa memberikan pelayanan yang lebih optimal? Apa yang harus dilakukan bila kita mendapat placenta akreta saat operasi berlangsung?

Dalam hal ini penyelenggaraan SIAP-2 adalah untuk menjawab pertanyaan-pertanyaan di atas, tentunya juga menjawab problematika lain seputar placenta akreta dari sisi manajemen dan komplikasinya.

Pada kesempatan ini, izinkan kami untuk menyumbang buah pikir dan riset yang selama ini telah dilakukan dan dikembangkan di RSUD Dr Soetomo Surabaya demi penatalaksanaan placenta akreta yang lebih baik.

Demikian juga kehadiran pakar “one step conservative surgery” Prof. Palacios Jaraquemada dari Argentina pada acara SIAP-2 ini diharapkan menjadi sarana untuk berbagi ilmu dan pengalaman beliau dalam penanganan placenta akreta.

Semoga dengan adanya acara ini, kita semua dapat saling meningkatkan kewaspadaan dan memberikan penanganan optimal pada placenta akreta di masa ini dan yang akan datang.

Selamat menimba ilmu, InsyaAllah bermanfaat bagi semua.

Khanisyah Erza

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PLACENTA LEFT INSITU

Ernawati

Conservative management of placenta accreta is defined as all procedures or strategies aiming to avoid a peripartum hysterectomy and its related morbidity and consequences. The main goals are to decrease severe maternal morbidity related to the placental disease, especially the amount of blood loss, bladder and ureteral injury and also preserve the option of future pregnancies.

There are 4 main types of conservative management:

- (1) Extirpative treatment
- (2) Expectant management or leaving the placenta in situ
- (3) One-step conservative surgery
- (4) The Triple-P procedure

This topic will discuss about leaving Placenta in situ.¹

Leaving Placenta In Situ or Expectant Management

Leaving placenta in situ means that the placenta is left inside the uterine after delivery of the newborn and ligation of the cord at its placental insertion site and waiting for complete resorption. It was first described mainly in France and initially was termed "conservative treatment of placenta accreta."² The goals of this approach are to avoid the morbidity associated with hysterectomy, preserve fertility, and still avoid hemorrhage. Cesarean-hysterectomy is considered the gold standard treatment for MAP³⁻⁹ but is associated with high rates of severe maternal morbidity (40%-50%).⁹ Cesarean-hysterectomy with placenta percreta is even more morbid, with reported mortality rates up to 7%.¹⁰ By leaving the MAP in situ after the delivery of the child, one can expect a significant decrease of blood flow within the uterus and even the parametrium. This also will occur



within the placenta, and the placenta will progressively and spontaneously detach from the uterus and even adjacent organs by necrosis. This approach is particularly attractive for severe MAP with adjacent organ invasion in order to avoid operative complications and injuries.

On the other hand, this approach also has significant risks. These include intrauterine infection, placental abscess, and even sepsis, as well as unpredictable massive hemorrhage. Moreover, it requires long-term monitoring until complete resorption of the placenta occurs. The procedure approach :

1. Determined the exact position of the placenta by a preoperative ultrasound.
2. Preparation for cesarean delivery, all materials required for an immediate conversion to hysterectomy are readily available.
3. Laparotomy is made by a midline cutaneous incision, often enlarged above the umbilicus. The uterine approach uses a midline or "classical" incision at a distance from the placental bed.
4. Delivery of the baby
5. The cord is cut at the site of insertion, and the uterine cavity is closed.
6. Postoperative antibiotic therapy (amoxicillin and clavulanic acid) is usually administered prophylactically for 5 days to minimize the risk of infection, although efficacy is uncertain.
7. Adjunctive procedures (embolization or vessel ligation, temporal internal iliac occlusion balloon, methotrexate, hysteroscopic resection of retained tissues) may be used to attempt to decrease morbidity or to hasten placental resorption. As with antibiotic treatment, none of these interventions has been proven to improve outcomes.¹

Leaving placenta in situ as one of conservative management still debatable. There were no consensus had been develops to do these method. As mention before, beside



advantages there also dangered problem awaiting. The prolonged course and significant risks of uterine conservation with the placenta left in situ were illustrated by a systematic review of 10 cohort studies and 50 case series or case reports describing 434 patients with placenta accreta, increta, or percreta managed conservatively (expectant management, uterine artery embolization, methotrexate therapy, hemostatic sutures, arterial ligation, balloon tamponade). The following short-term outcomes were reported, but data were not available for all outcomes in all studies:

- Severe vaginal bleeding: 53%
- Sepsis: 6%
- Secondary hysterectomy: 19% (range 6 to 31%)
- Death: 0.3% (range 0 to 4%)
- Subsequent pregnancy: 67% (range 15 to 73%)

In the largest study, which included 167 women with placenta accreta managed conservatively using a variety of modalities², 131 women (78%) retained their uterus, 18 women required hysterectomy within 24 hours of delivery because of hemorrhage, and 18 women underwent hysterectomy because of complications at a median 39 days after delivery (range 9 to 105 days). Ten women experienced severe morbidity, including sepsis, vesicouterine fistula, and/or uterine necrosis. In women who retained their uterus, placental resorption was observed on follow-up at a median of 13.5 weeks (range 4 to 60 weeks). However, 25 percent of these women underwent hysteroscopy, curettage, or both to remove retained placental tissue at a median of 20 weeks postpartum (range 2 to 45 weeks).²

The more scarce data regarding conservative management of placenta percreta are available. Pather et al. reported three cases of placenta percreta with conservative management and also performed a review of available data. They found 57 cases of suspected placenta percreta that were



managed conservatively with the placenta left in situ. Hysterectomy was avoided in 60% of cases and 42% experienced major morbidity (including sepsis, coagulopathy, hemorrhage, pulmonary embolism, fistula, and arteriovenous malformation).¹¹ In a similar review, Clausen et al. retrieved 36 cases of placenta percreta managed by leaving the placenta in situ.¹² Delayed hysterectomy was required in 58% of cases. In a French national study that reported the largest series of consecutive cases of placenta percreta with attempt to leave the placenta in situ (n = 18), prenatal diagnosis by ultrasonography or magnetic resonance imaging (MRI) was performed in 14 cases and during labor (at the time of the cesarean) in four cases.² Conservative treatment was successful for 10 of 18 cases (55.6%) of placenta percreta, and severe maternal morbidity occurred in 3 of the 18 (16.7%). Of the 8 cases of placenta percreta with bladder involvement, conservative treatment was successful in 6 cases (75%), and severe maternal morbidity occurred in 2 (25%). Although morbidity was considerable, it was favorable in comparison with similar cases with planned cesarean-hysterectomy. These results show that leaving placenta in situ is a reasonable option for women who are properly counseled and motivated, in particular, if they desire future pregnancies. It also is critical that they agree to close follow-up monitoring in centers with adequate equipment and resources.^{3-9,13} However, many questions remain unanswered.

Methotrexate adjuvant treatment

Some authors have proposed the use of methotrexate to hasten placental resolution. Its efficacy for this indication has never been demonstrated and only case reports and small case series with no control groups have been reported. Accordingly, the Royal College of Obstetricians and Gynaecologists (RCOG) does not recommend its routine use. The low rate of placental cell division in the third trimester compared to early pregnancy



raises the question of whether methotrexate has any effect on placental resorption. In addition, methotrexate rarely causes serious harm such as neutropenia or medullary aplasia, even with a single dose in a young patient.¹⁴ These complications can have a dramatic impact in a patient with an intrauterine placenta with a 30% risk of infectious complications.¹³ Finally, the only case, to our knowledge, of maternal death after conservative treatment was secondary to a cascade of complications (bone marrow suppression, sepsis, renal failure) attributed to an intra-umbilical cord administration of methotrexate. **For these reasons, the use of methotrexate in cases of conservative treatment do not advocate.**^{1,15}

Uterine devascularization prevention

Preventive devascularization can be achieved by techniques used to treat PPH (embolization, bilateral uterine artery ligation, stepwise uterine devascularization, bilateral ligation of hypogastric arteries), although these uterine-sparing procedures may be less effective in cases of placenta accreta.¹ A retrospective comparative study reported, the median delay for complete placental resorption was significantly shorter when women underwent an embolization (median = 17 weeks; q1011.5; q3023; range:1–38 weeks) compared to women who do not undergo embolization (median = 32 weeks; q1018; q3048.8; range: 12–111 weeks) ($p = 0.036$). Unfortunately, the reason for embolization was not clearly reported by the authors.¹ In contrast, devascularization may cause harm.¹³ In the French multicenter series of 167 placenta accreta treated conservatively, the only two cases of uterine necrosis occurred in 2 of 62 patients who underwent arterial embolization.¹³ Other adverse effects of uterine artery embolization also have been reported. **The risk:benefit ratio of routine devascularization procedures in conservative management of placenta accreta remains to be determined.**¹



Patients monitoring on conservative management

Unfortunately, there are no data regarding this important issue. Literature said **patient should monitored in the hospital for 8 days and administer prophylactic antibiotics for 5 days.** This window is the time of highest risk for bleeding and infection. Prior to discharge, the woman and her partner should be advised about the need for close, long-term monitoring. There is still a risk for bleeding and infection and the size and vascularization of the retained placenta often does not significantly change for several weeks. The following symptoms require emergency medical attention: hyperthermia, severe pelvic pain, foul-smelling vaginal discharge, and bleeding. The patient should be advised about the possibility of abnormal and persistent vaginal discharge.¹

There should be a multidisciplinary team available with the skills to manage complications 24 hours a day, 7 days a week. Patients are seen for outpatient clinic visits weekly for the first 2 months. If the patient is asymptomatic, monthly visits are then conducted until complete resorption of the placenta. The visits include a clinical examination (bleeding, temperature, pelvic pain), pelvic ultrasound (size of retained tissue), and laboratory screen for infection (hemoglobin and leukocytes, C-reactive protein, vaginal sample for bacteriological analysis).¹³ Of course, the efficacy of these measures is uncertain.

Use magnetic resonance (MRI) imaging and beta-human chorionic gonadotropin (β -HCG) level for monitoring are also uncertain. Nevertheless, Soyer et al. used MRI to follow 23 women with placenta left in situ for MAP.¹⁵ **They speculated that MRI may help predict delay for complete placental resorption.**³⁶

It is not clear whether decreasing levels of β -HCG correlate with the rate of involution of placental tissue. Khan et al. and Torrenza et al. reported several cases of placenta left in situ



followed by monitoring serum β -HCG levels. Serum β -HCG levels decreased to minimal levels in 5 months in the Khan study and in 5–10 weeks in the Torrenza study.¹⁶ **In both study β -HCG levels did not correlate with the volume of remaining tissue.**^{1,15-16}

Routine hysteroscopic resection of retained placental tissue

Again, data regarding this issue are scarce. In a small cohort series of 23 women with placenta left in situ for placenta accreta, 12 had undergone hysteroscopy under ultrasound guidance due to pain and/or bleeding with retained tissues. The use of bipolar energy was limited as much as possible to minimize risk of uterine perforation. The median size of the retained placenta was 54 mm. No complications occurred due to hysteroscopic resection. Complete removal was achieved after one, two, and three hysteroscopic procedures in five (41.7%), two (16.7%), and four (33.3%) cases, respectively. One delayed hysterectomy was performed after "failure" of the hysteroscopic procedure. It seems that hysteroscopic resection may shorten recovery time without harmful effects in symptomatic women. **The role of prophylactic hysteroscopy or the timing of it in asymptomatic women is unknown.**¹

Systematic delayed interval hysterectomy

A possible advantage of leaving the placenta in situ is to plan a delayed interval hysterectomy after partial involution of the placenta and decreased uterine vascularity. This may decrease hemorrhagic morbidity and risk of injury to adjacent organs. This strategy seems most attractive in women with placenta percreta, who are at highest risk for blood loss and urinary tract injury. Excellent outcomes have been reported using this approach in percreta cases. On the other hand, this approach requires two surgeries instead of one, and both may



be quite morbid. Also, there is a risk of hemorrhage or infection prompting the need for emergency hysterectomy during the planned interval. Finally, the optimal timing of planned delayed hysterectomy is uncertain.² It may only be possible to truly ascertain whether delayed interval hysterectomy is effective through appropriate clinical trials.¹

Long-Term Maternal Outcome and Subsequent Fertility and Obstetrical Outcome

Long-term reproductive outcomes following conservative management appear to be suboptimal, but data are limited. Although there appears to be an increased risk of developing intrauterine synechiae, most women who desire another pregnancy are able to conceive and are at increased risk of recurrent placenta accreta, which is not surprising given that the underlying abnormality of the endometrium has not been corrected and can be worsened by postpartum curettage. A retrospective multicenter study of 96 women with a history of conservative management of placenta accreta (ie, uterine preservation) observed that 8 had severe intrauterine synechiae and were amenorrheic. In three cases series with 9, 21, and 30 deliveries after conservative management of placenta accreta, recurrent placenta accreta was noted in 12 of the 60 subsequent deliveries (20%, range 13 to 29 %).¹⁸

Another consideration is that it is not possible to be certain that women undergoing conservative management truly had morbidly adherent placenta since they do not have histologic confirmation after hysterectomy. These women may comprise a different population at less risk for serious bleeding than women requiring hysterectomy. For example, cases of morbidly adherent placenta managed conservatively had lower rates of prior cesarean delivery and previa than those managed with hysterectomy. **These results show that successful expectant management for placenta accreta can be associated**



with successful subsequent fertility and pregnancy, although there is an increased risk of recurrent MAP.^{1,15,18}

Conclusion

Leaving placenta in situ is a reasonable option for women who are properly counseled and motivated, in particular, if they desire future pregnancies. It also is critical that they agree to close follow-up monitoring in centers with adequate equipment and resources. Also consider of severe complication : experienced severe morbidity, including sepsis, vesicouterine fistula, and/or uterine necrosis

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