

# Ethical And Medicolegal Considerations For Termination Of Pregnancy In Cases Of Placenta Accreta With Massive Bleeding At 18-19 Weeks Of Gestation: A Case Report

Taufik Suryadi<sup>1</sup>, Nurul Fikriani<sup>2</sup>, Kulsum Kulsum<sup>3</sup>

<sup>1</sup>*Department of Forensic Medicine and Medicolegal,*

<sup>1</sup>*Ethics and Medicolegal Consultant*

<sup>2</sup>*Department of Obstetrics and Gynecology,*

<sup>3</sup>*Department of Anesthesiology and Intensive Therapy*

*Faculty of Medicine, Universitas Syiah Kuala / the Zainoel Abidin Hospital Banda Aceh, Indonesia*

*Email: taufiksuryadi@unsyiah.ac.id<sup>1</sup>, nurulfikriani@gmail.com<sup>2</sup>, kulsum.anestesi@gmail.com<sup>3</sup>*

***Abstract: Placenta accreta is one of the complications of pregnancy in the form of adhesion of part or total of the placenta to the myometrium which can pose a risk of placenta praevia and massive bleeding. We report a case of a patient aged 41 years during her fifth pregnancy with gestational age 18-19 weeks who experienced placenta praevia totalis with suspected placenta accreta having complaints of recurrent active bleeding from the birth canal. The ethical dilemma that occurs concerns how the action should be taken and when the action is taken? The ethical consideration used in this case is the minus malum principle, namely by considering which one carries the least risk among the two, namely termination of pregnancy or continuing the pregnancy with the risk of threatening the mother's life due to bleeding. Medicolegal considerations used double effect and patient safety principles in obstetrics care. In this case it was decided to do pregnancy termination by total hysterectomy on the basis of maternal safety considerations.***

***Keywords: Ethics and Medicolegal, Placenta Accreta, Termination of Pregnancy***

## 1. INTRODUCTION

Medicolegal and ethical issues in medical science, especially in the field of obstetrics and gynaecology, continue to develop [1]. One of the ethical dilemmas that need to be discussed is termination of pregnancy and total hysterectomy in patients who have placenta accreta with massive bleeding complications. Placenta accreta is a pregnancy complication which has an increasing incidence in recent years. This disorder is in the form of adhesions between the placenta and myometrium instead of the decidua. The incidence of placenta accreta was much more common compared to placenta increta and precreta with the incidence of placenta

accreta as much as 79 percent, placenta increta 14 percent and placenta percreta 7 percent [2]. Placenta accreta spectrum disorder (PAS) has become a life-threatening obstetric problem as its incidence has increased from 0.12 to 0.31% in the past 30 years. Placenta accreta causes 7% -10% of maternal mortality cases in the world [3].

PAS is a potentially life-threatening pregnancy complication that requires coordinated interdisciplinary care to achieve a safer outcome. The increasing incidence of this disease is due to the increasing number of uterine surgical procedures, including the increased incidence of pregnancy after caesarean section. Other risk factors include a history of placenta praevia, advanced maternal age, and multipara [4,5]. Therefore, it is necessary to consider the cooperation of a team of doctors consisting of obstetricians or gynaecological oncologists, anaesthesiologists and consultants of urological surgery, and vascular surgery before carrying out the surgery [6]. Determining the right time for termination of pregnancy in patients with complaints of recurring active bleeding from the birth canal is a dilemma often faced by obstetricians. An analysis of ethical and medicolegal considerations is needed to support the medical decisions that will be taken by the team of doctors.

## **2. CASE REPORT**

Reported a pregnant woman 41 years old, gravida 5, para 3, with a current gestational age of 18-19 weeks who had previously undergone 3 caesarean sections. The patient came to the hospital complaining of active bleeding from the birth canal. The patient has experienced bleeding 4 times during this pregnancy. The patient has previously been hospitalized 3 times for bleeding from the birth canal and has received blood transfusions. The patient underwent antenatal care regularly every month at the obstetrician. From the results of her physical examination, it was found that blood pressure was 80/50 mmHg, heart rate was 110 times/minute, respiratory rate was 24 times/minute. From the results of internal examination, it was found that the external urethra orifice was closed with active bleeding. Laboratory examination of the patient showed a hemoglobin level of 7.6 g/dL.

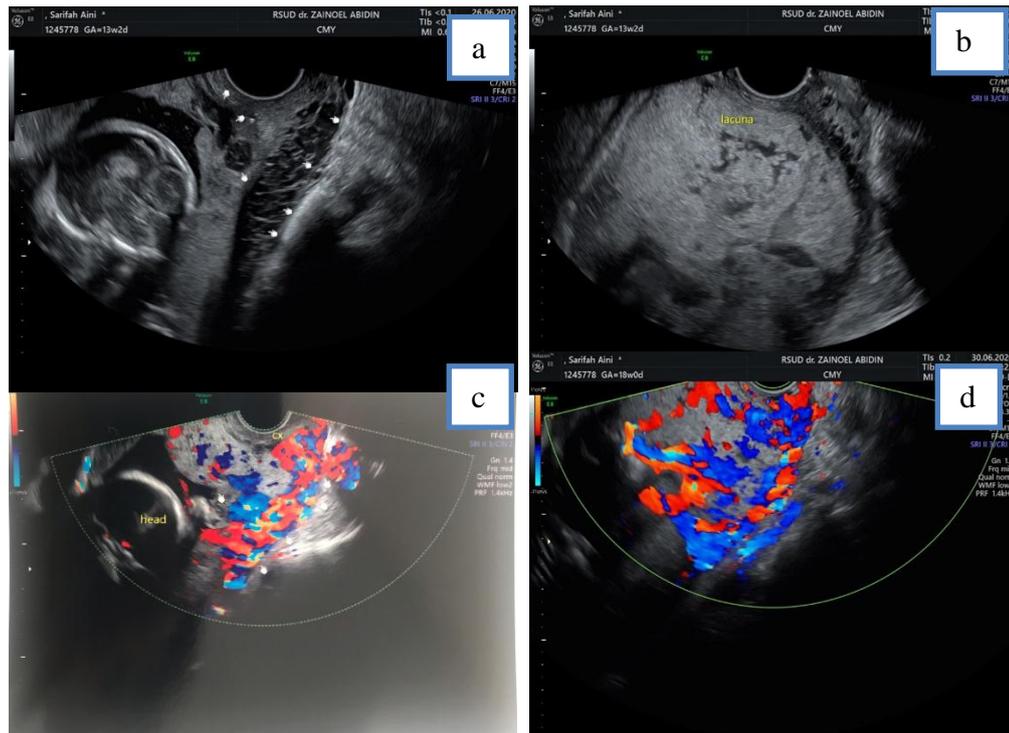


Fig. 1. Placenta accreta ultrasonography (USG): Shows a bridging vessel image on the placenta (a,c), shows a lacuna on the placenta (b,d) (sources: Department of Obstetrics and Gynaecology, Zainoel Abidin Hospital, Banda Aceh Indonesia)

Ultrasound examination showed a single live fetus intra uterine corresponding to 18-19 weeks gestation, with a fetal weight of 221 g. The placenta was in the anterior corpus covering the entire internal urethral orifice. We also found positive bridging vessel (figure 1.a and 1.c), grade 3 lacuna (figure 1.b and 1.d), 1.3 mm thick myometrium with a Placenta Accreta Index (PAI) score 96%, we therefore suspected placenta accreta. From the results of the examination obtained, if the pregnancy continues with a PAI score of 96% and the patient has experienced repeated active bleeding, this condition is deemed life threatening to the patient.

The patient planned for pregnancy termination with total hysterectomy surgery. However, the decision to immediately terminate pregnancy through removal of the uterus is also not an easy decision and has to be discussed with a team of doctors who will be involved in the surgery. For this reason, a joint conference from various disciplines was held, and the minus mallum principle is applied, in which decision-making was based on considerations which have the least risk. The results of the multi-disciplinary discussion made the decision to do pregnancy termination at 18-19 weeks with total hysterectomy by using the Poro technique. After hysterectomy surgery, the patient's condition improved and was later on discharged.

### 3. DISCUSSION

Placenta accreta occurs when all or part of the placenta attaches abnormally to the myometrium. Placenta accreta is further divided into placenta accreta, increta and percreta,

what distinguishes the three is the depth of the placental villi invading the uterine lining. The risk factors for placenta accreta in this case were history of 3 caesarean sections and age over 35 years. If placenta praevia is present, the risk of placenta accreta is 3% at first caesarean delivery and increases to 40% or more at third caesarean delivery [7].

Symptoms that appear with placenta praevia generally include painless vaginal bleeding at the end of the second or early third trimester. It is diagnosed by ultrasound during the second trimester or incidentally during surgery [8]. However, it is different in this case, where complaints of bleeding from the birth canal have been felt since the first trimester of pregnancy. Entering the beginning of the second trimester, bleeding from the birth canal becomes more frequent. In the absence of risk factors for preterm birth in women on the placenta accreta spectrum, the Royal College of Obstetricians and Gynecologists (RCOG) recommends planned delivery at 35 + 0 to 36 + 6 weeks of gestation providing the best balance between fetal maturity and the risk of unscheduled delivery [9]. However, in this case, repeated active bleeding had occurred from the first trimester of pregnancy. If the pregnancy is maintained until 35 to 36 weeks of gestation, it will cause morbidity and even mortality to the mother.

The ethical dilemma that arose in this case was what the team of doctors should do. In the principles of clinical ethics, it must always be able to maximize benefits compared to risks, or at least be balanced. In the ethical principles that suits this case is beneficence and non-maleficence. The doctor must always contribute to the health and well-being of the patient (beneficence) and be careful to refrain from taking any action that could cause harm to the patient (non-maleficence). [10,11,12,13,14].

In this case, if the pregnancy continues, the benefit is that the baby will be born, but it is not certain that it can also be saved if the mother has continuous bleeding. There is a risk that if the pregnancy continues, repeated active bleeding with a higher blood volume is likely. This is because at the age of 18-19 weeks, bleeding from the birth canal has occurred four times. It will take a long time to reach the termination age as recommended by RCOG, namely at the age of 35 + 0 to 36 + 6 weeks [13]. If recurrent bleeding occurs, the patient will lose a lot of blood which can result in hypovolemic shock which can ultimately threaten the safety of the mother. The choice to continue with the pregnancy does not appear to conform to the principle of risk-benefit balance [11,12].

The second alternative to solve the ethical dilemma of this case is to terminate the pregnancy. For this reason, there is an ethical dilemma regarding when is the time to terminate the pregnancy in this patient? Of course, in making decisions, it must be based on existing ethical principles. By prioritizing the minus mullum principle, namely by considering which one is the least risky between the two options [10]. The decision to continue or terminate the pregnancy both carries risks. But doctors must be able to make choices. The risk of the mother losing her baby if the pregnancy is terminated is certainly smaller than the safety of the mother being threatened if the pregnancy is continued. [14].

By prioritizing the principle of double effect and patient safety, it was decided to terminate the pregnancy at 18-19 weeks without considering the condition of the fetus in the uterus [15]. The action chosen was a total hysterectomy laparotomy using the Poro technique, namely surgery without removing the fetus from the uterine cavity and immediately performing a hysterectomy. A total hysterectomy was considered because the uterus that has been performed three cesarean sections has the high risk of causing placenta accreta with re-bleeding if the pregnancy occurs again.

In this case, the patient underwent a hysterectomy operation not to injure the patient by removing the uterus so that the patient was unable to get pregnant again, but the aim of this procedure was to save the patient from the possibility of continuous massive bleeding. This principle is called the double effect principle, in which the good goal must be passed in a bad way (removing the uterus) because it is the only way that must be done for patient safety [14,15]. This double effect principle supports the main principle of non-maleficence in ethical decision making in difficult cases [10,12,15].

#### **4. CONCLUSION**

Ethical and medicolegal considerations in cases of pregnancies complicated by placenta accreta 96% of the PAI score with a history of recurrent bleeding should be carried out carefully and professionally. The decision regarding pregnancy termination by total hysterectomy in this case is done by prioritizing the main principles of beneficence and non-maleficence. The dominant choice of supporting ethical principles is by using the minus malum principle, namely by considering which one has the least risk between the two options, and strengthened by the principles of double effect and patient safety.

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#### **CONFLICTS OF INTEREST**

The authors declare that there are no competing interests related to the study

#### **6. REFERENCES**

- [1] Suryadi T, Rizia F, Kulsum K. Ethical and medicolegal in case pregnancy due to sexual abuse in schizophrenic patient. *Ind J Biomed Sci.* 2020; 14(1): 32-8.
- [2] Farzaneh F, Esmailzadeh A. Placenta accreta at 15 weeks of gestational age and uterus preservation with hysterectomy abortion. *Zahedan J Res Med J.* 2017; 19(10), 1-3.
- [3] Gelany SE, Mosbeh MH, Ibrahim EM, Mohammed M, Khalifa EM, Abdelhakium AK, et al. Placenta Accreta Spectrum (PAS) disorders : incidence , risk factors and outcomes of different management strategies in a tertiary referral hospital in Minia , Egypt : a prospective study. *BMC Pregnancy and Childbirth* 2019; 5: 1–8.
- [4] Ziegler C. Screening, diagnosis, and management of placenta accreta spectrum disorders. *J Obstet Gynaecol Canada* [Internet]. Elsevier Inc. 2019;41(7):1035-49. <https://doi.org/10.1016/j.jogc.2018.12.004>

- [5] Slaoui A, Talib S, Nah A, El Massoui K, Benzina I, Zerai N, et al. Placenta accreta in the department of gynaecology and obstetrics in Rabat, Morocco: case series and review of the literature. *Pan Afr Med J.* 2019; 33(86): 1–12.
- [6] El-Agwany S, Fekry SI. Role of ultrasound and first trimester maternal serum markers in early prediction of placenta accreta. *EC Gynaecol.* 2017; 5: 152-66.
- [7] Belfort MA. Placenta accreta. *Am J Obstet Gynecol.* 2010: 430-9.
- [8] Senkoro EE, Mwanangangu AH, Chuwa FS, Msuya SE, Mnali OP, Brown BG, et al. Frequency, risk factors, and adverse fetomaternal outcomes of placenta previa in Northern Tanzania. *Hindawi J Pregnancy.* 2017: 7-11.
- [9] Jauniaux ERM, Alfirevic Z, Bhide AG, Belfort MA, Burton GJ, Collins SL, et al. Placenta praevia and placenta accreta: Diagnosis and management. *R Coll Obstet Gynaecol.* 2018; (27):1-48.
- [10] Afandi D. The basic principles of bioethics in ethical clinical decision making. *Andalas Med J* 2017; 40(2): 111-21.
- [11] Bester JC. Beneficence, interests, and wellbeing in medicine: What it means to provide benefit to patients. *Am J Bioeth.* 2020; 20(3): 53-62. <https://doi.org/10.1080/15265161.2020.1714793>
- [12] Mappaware NA, Sima S, Syahril E, Mokhtar S, Royani I, Mursyid M. Stage III-B cervical-cancer of young age in medical, bioethics, and clinical ethics perspectives. *Indian J Forens Med Toxicol.* 2020; 14(2): 2565-70.
- [13] Federation International Gynecologists and Obstetricians (FIGO). Introduction to principles and practice of bioethics: case-studies in women's health. 2012: 7-10.
- [14] Gillon R. Defending the four principles approach as a good basis for good medical practice and therefore for good medical ethics. *J Med Ethics.* 2015; 41: 111-6.
- [15] Wholihan D, Olson E. The doctrine of double effect, a review for the bedside nurse providing end of life care. *Journal of Hospice & Palliative Nursing.* 2017; 205-11.