

Different Outcome in Early and Late Abdominal Pregnancy

A Case Series on Abdominal Pregnancy at West Nusa Tenggara Hospital

Febie Putra Suwana^{1*}, I M.W. Mahayasa², Muhammad Rizkinov Jumsa³,
and A. Karima¹

¹ Apprentice doctor Department of Obstetrics and Gynecology West Nusa Tenggara Hospital

² Department of Obstetrics and Gynecology West Nusa Tenggara Hospital

³ Department of Obstetrics and Gynecology Mataram University

* Corresponding author. Email: febieputrasuwana@gmail.com

ABSTRACT

Abdominal pregnancy is a very rare and very dangerous type of ectopic pregnancy, this kind of pregnancy occurs in 1:10.000 to 30.000 pregnancies (1,4% of all ectopic pregnancies). This kind of pregnancy is a challenge to diagnose and treat, especially in a developing country such as Indonesia. In this case series, the author report two cases of abdominal pregnancy. The 1st case is a 35 years old woman with primigravida at 31 weeks presented with abdominal pain and no vaginal bleeding. Physical examination revealed a palpable mass that measures at 3 fingers above the belly button. Ultrasound revealed the baby was outside the uterus. She then underwent a laparotomy. The baby was found at the peritoneum cavity and was born alive. Unfortunately, both patient and the baby did not survive. The 2nd case is a 23 years old woman with primigravida at 16 weeks presented with abdominal pain and vaginal bleeding. Physical examination revealed a palpable mass that measures at the belly button. Ultrasound revealed that the baby did not have a heartbeat and was located outside the uterus. She then undergoes a successful laparotomy. The patient was sent home 5 days later in good condition. Abdominal pregnancy is a rare and life-threatening condition, but early diagnosis and treatment can save lives and reduce morbidity. The obstetrician should consider abdominal pregnancy when oligohydramnios was found and induction is failed. MRI imaging should be considered in late abdominal pregnancy to give a better image of the location and anatomy of the current condition.

Keywords: Abdominal Pregnancy, Ectopic Pregnancy, Early Abdominal Pregnancy, Late Abdominal Pregnancy

1. INTRODUCTION

Abdominal pregnancy is a condition where an ectopic pregnancy occurs in the peritoneal cavity outside the uterus, fallopian tube, and ovaries [1]. The prevalence of this condition is 1:10.000 to 1:30.000 of all pregnancies [2]. This kind of ectopic pregnancy is a life-threatening condition with a high mother mortality rate of approximately 1-30% [3,4] and a fetal mortality rate of approximately 40-95% [4].

Looking at the gestational age, there are two categorized of abdominal pregnancy, early abdominal

pregnancy (\leq 20-weeks' gestation) and late abdominal pregnancy ($>$ 20-weeks' gestation) [4].

Diagnosing uncomplicated abdominal pregnancy is a challenge itself due to the lack of specific signs and symptoms for this condition. [2,5]. A review of 163 cases and a case report in a tertiary facility show that diagnosing an abdominal pregnancy is hard, especially in developing countries [2,6]. Even with ultrasound, some abdominal pregnancies might be miss diagnosed, and MRI is one of the best choices for diagnosing abdominal pregnancy [2].

2. METHOD

This study reported 2 cases of abdominal pregnancy. First was late abdominal pregnancy while the second case was early abdominal pregnancy. Both cases were compared according to its characteristics, especially its outcome.

3. CASE REPORT

3.1. Case 1

A 35-year-old woman, with primigravida at 31 weeks presented with abdominal pain and no vaginal bleeding. The patient was referred from secondary healthcare facility due to extra uterine pregnancy that was found during ultrasound at 30 weeks gestation.

This patient usually does her antenatal care on primary healthcare conducted by midwife, and no suspicious abnormality was found. She had no history of any contraceptive and any surgery before. On physical examination, we found the fundal height was 3 fingers above the belly button (Figure 1). Fetus position and anatomy was not easy determined. On ultrasound examination we found that the fetus head was in the Douglas cavity with no cardiac activity (Figure 2).

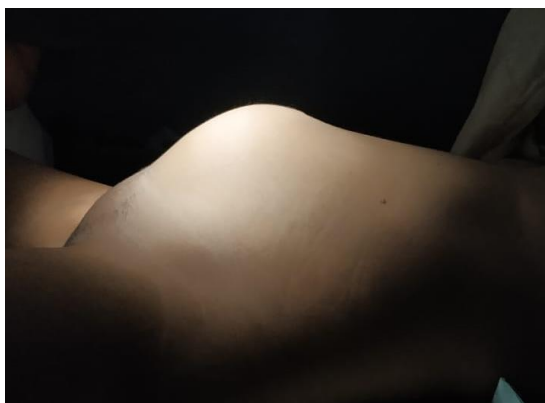


Figure 1 Abdomen lateral view case 1



Figure 2 Pre-Operative Ultrasound case 1

The patient then underwent explorative laparotomy for fetus evacuation. Intraoperative found that the placenta was attached in the fundus of the uterus extending behind the uterus, left adnexa, and left ovarium (Figure 3). The baby was found without an amnion sac, the leg was behind the placenta, and the head was inside the Douglas cavity (Figure 4). The baby was delivered with APGARs 1-3-5 at 1, 5, and 10 minutes, respectively. Unfortunately, the baby passed away 3 hours after being delivered. After the baby was delivered, there was heavy bleeding, so the patient was closed with 6 packings. Two days after, she underwent 2nd laparotomy to evacuate the packings, there was no significant bleeding, and the patient was closed with drain. The patient was observed in the ICU for close monitoring, methotrexates chemotherapy was added. Unfortunately, the patient passed away 4 days after the second surgery due to septic even she was given a double antibiotic.



Figure 3 Intraoperative findings case 1

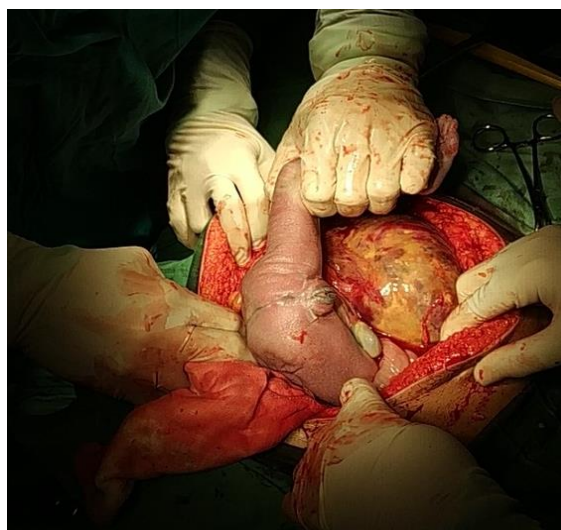


Figure 4 Baby position intraoperative

3.2. Case 2

A 23-year-old woman with primigravida at 16 weeks presented in the emergency department with abdominal pain that was getting worse by day and several histories of vaginal bleeding.

She checked herself for her antenatal care several times with an obstetrician who diagnosed her with intrauterine pregnancy complicated with oligohydramnios. She had no history of contraceptives and any surgery before. On physical examination, we found the fundal height was 2 fingers below the belly button (Figure 5). Unfortunately, ultrasound examination wasn't performed in the emergency department.



Figure 5 Abdomen lateral view case 2

The patient was then assessed with inevitable abortion and planned labor induction with oxytocin drip. Six days after the first oxytocin drip, there was no sign of labor, so the patient was consulted to an obstetric and gynecology oncology consultant, and ultrasound evaluation revealed that the fetus was outside the uterine cavity. The head was in the Douglas cavity with no cardiac activity (Figure-6). Then the patient was assessed with abdominal pregnancy and planned to undergo explorative laparotomy for fetus evacuation.



Figure 6 Pre-Operative Ultrasound case 2

Intraoperative, there was heavy bleeding in the early operation, but the surgeon managed to control it. The baby was found behind the uterus inside the Douglas cavity (Figure 7), and the placenta was attached in the left adnexa, extending to the sigmoid colon and omentum. The placenta was able to be separated successfully (Figure 8). Post-operative, the patient stayed in the hospital for another 5 days for observation and was discharged in good condition.

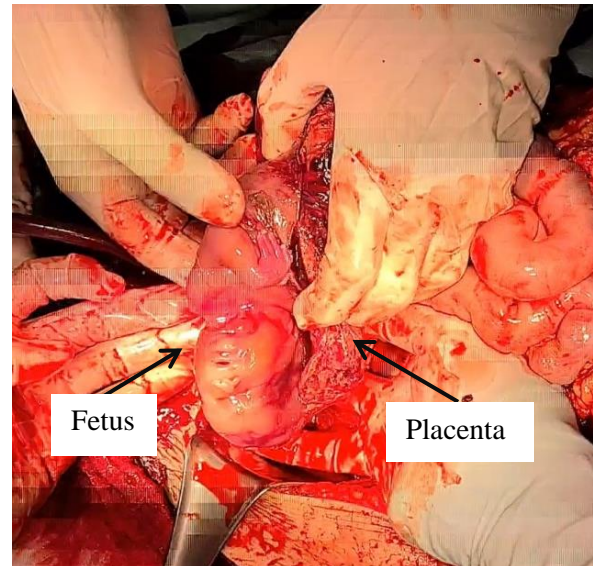


Figure 7 Intraoperative findings case 2



Figure 8 Fetus and Placenta findings case 2

4. DISCUSSION

Abdominal pregnancy is a rare and dangerous type of ectopic pregnancy, where early diagnosis and treatment can make a huge difference in outcome [7]. In

this case, we presented two abdominal pregnancies. The 1st case was a late abdominal pregnancy in which both mother and fetus did not survive. The 2nd case was an early abdominal pregnancy that the mother survived. This case series showed how hard it was to diagnose abdominal pregnancy, especially in developing countries where not every pregnant woman was willing to check herself to the obstetrician. An even obstetrician with ultrasound modality sometimes misdiagnoses abdominal pregnancy.

Both patients complain of persistent abdominal pain, which was the most common complaint in abdominal pregnancy [8]. In the 1st case, there was no significant difference in physical examination. Further ultrasound examination showed that finding the heartbeat on abdominal pregnancy without amnion sac was a challenge and sometimes misdiagnosed with oligohydramnios. The 2nd case showed that even using ultrasound examination, abdominal pregnancy was hard to diagnose [4]. Using Non-Contrast Magnetic Resonance Imaging (MRI) is a better choice for diagnosing late abdominal pregnancy due to better sensitivity and specificity [3]. This modality also gave the surgeon better accuracy on the ectopic location and a better image to plan the surgical treatment [9].

The first-trimester abdominal pregnancy could be treated using laparoscopic surgery since removing small and less vascular tissue was easier [9]. The congenital malformation is found in 40% of abdominal pregnancies [1], but a successfully late abdominal pregnancy also has been documented where both the mother and the baby survived in good condition [8,10]. In a woman who wants expectant management, close monitoring should be done. When the fetus is already at a mature age, laparotomy and pre-operative selected arterial embolization or leaving the placenta in situ are options due to heavy bleeding complications when the placenta is removed [8,9].

5. CONCLUSION

The purpose of this case series is to highlight the different outcomes from early and late abdominal pregnancy. Abdominal pregnancy itself is a rare and life-threatening condition, but early diagnosis and treatment can save lives and reduce morbidity [7]. The obstetrician should consider abdominal pregnancy when oligohydramnios was found and induction is failed [9]. MRI imaging should be considered in late abdominal pregnancy to give a better image of the location and anatomy of the current condition [2].

AUTHORS' CONTRIBUTIONS

Suwana and Karima were responsible for the concept, Suwana wrote the paper, and the manuscript was reviewed by Mahayasa and Jumsa. Operative was done by Mahayasa. All authors approved the final version.

ACKNOWLEDGMENTS

We would like to acknowledge dr Sulaeman and dr Komang as the first attending on both case who revered the patient to our care.

REFERENCES

- [1] O. O. Isaiiah, et al. "Abdominal pregnancy: A case report of a viable nondysmorphic fetus." *Nigerian medical journal: journal of the Nigeria Medical Association* 60.1 (2019): 43. https://doi.org/10.4103/nmj.NMJ_26_19
- [2] S. Sahara, et al. "Diagnosis of abdominal pregnancy still a challenge in low resource settings: a case report on advanced abdominal pregnancy at a tertiary facility in Western Kenya." *Pan African Medical Journal* 31.1 (2018). <https://doi.org/10.11604/pamj.2018.31.239.17766>
- [3] T. N. Manh, N. T. H. Anh, and P. H. Thanh. Rectal ectopic pregnancy: A case report. *Medicine* 100.6 (2021). <https://doi.org/10.1097/MD.00000000000024626>
- [4] P. J. Lussy, et al. Late abdominal pregnancy in a post-conflict context: case of a mistaken acute abdomen-a case report. *BMC pregnancy and childbirth* 20.1 (2020): 1-6. <https://doi.org/10.1186/s12884-020-02939-3>
- [5] H. F. Getachew, et al. Advanced abdominal pregnancy, with live fetus and severe preeclampsia, case report. *BMC pregnancy and childbirth* 17.1 (2017): 1-4. <https://doi.org/10.1186/s12884-017-1437-y>
- [6] N. D. Nkusu and E. M. Einterz. Advanced abdominal pregnancy: case report and review of 163 cases reported since 1946. (2008).
- [7] P. Chaitali, J. Feldman, and C. Ogedegbe. Complicated abdominal pregnancy with placenta feeding off sacral plexus and subsequent multiple ectopic pregnancies during a 4-year follow-up: a case report. *Journal of medical case reports* 10.1 (2016): 1-6. <https://doi.org/10.1186/s13256-016-0808-8>
- [8] M. Zelalem, A. Getachew, and M. Adefris. Term abdominal pregnancy: a case report. *Journal of medical case reports* 9.1 (2015): 1-3. <https://doi.org/10.1186/s13256-015-0635-3>
- [9] D. Sunita, et al. Primary abdominal pregnancy: a case report. *Journal of clinical and diagnostic research: JCDR* 10.11 (2016): QD04. <https://doi.org/10.7860/JCDR/2016/23061.8859>
- [10] Tajudeen, et al. Advanced extrauterine pregnancy at 33 weeks with a healthy newborn. *BioMed research international* 2014 (2014). <https://doi.org/10.1155/2014/102479>