

CASE REPORT

A live term intra-abdominal pregnancy in a Field Hospital: a case report

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Abstract

Abdominal pregnancy is a rare form of ectopic pregnancy with high morbidity and mortality for both the mother and the fetus. Diagnosis can be challenging, especially in a resource-limited setting. We report a case of abdominal pregnancy that presented to Médecins Sans Frontières field hospital in Agok, South Sudan, with abdominal pain. Examination revealed a term pregnancy and a live fetus in transverse lie. The diagnosis of abdominal pregnancy was made intraoperatively, with successful management and delivery of a healthy baby.

INTRODUCTION

Abdominal pregnancy is a rare form of ectopic pregnancy with high morbidity and mortality for both the mother and the fetus. Ectopic pregnancy represents about 1–2% of all pregnancies, with 95% of those occurring in the fallopian tubes [1]. The incidence of abdominal pregnancy varies in different populations, ranging from 1:10 000 to 1:30 000 pregnancies, and being most prevalent in developing countries with limited resources and limited diagnostic facilities [2].

The diagnosis of abdominal pregnancy can be challenging, especially in a resource-limited setting. When discovered early, laparotomy is usually done due to the high risk it carries to the mother. An abdominal pregnancy that reaches term with a healthy mother and fetus, thus, is a rare occasion.

CASE REPORT

A 25-year-old G2P0, presented to the maternity department in MSF Agok hospital in South Sudan, on 14th of October 2016 with abdominal pain. She had not sought medical advice or antenatal care prior to this visit. Her pregnancy was estimated to be 34–35 weeks, as she did not know the exact date of her last menstrual cycle. She had been having progressive abdominal pain for 2 days. The pain was generalized and increased with movement. She had a previous miscarriage, and was concerned about this pregnancy.

On examination, the abdomen was mildly tender, and the fetal head could be easily palpated at the right upper quadrant. The patient had a normal blood pressure, with mild tachycardia at 100 bpm. Her haemoglobin level was 10 g/dl. Ultrasound

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scan was performed, which confirmed a live term fetus, in transverse lie, with no indication of extra-uterine pregnancy. Caesarean section was planned in view of the transverse lie.

A Pfannenstiel (transverse lower abdominal) incision was used. A normal non-pregnant uterus was found, with the placenta attached to the fundus. The incision was extended to an inverted-T incision. A full term, live female fetus was delivered. There was active bleeding from the placenta, which was attached to the fundus and left cornual region of the uterus, the small bowel mesentery and the left lateral abdominal wall. Partial removal of the placenta was carried out to control the bleeding. Further inspection of the uterus revealed no evidence of perforation. Left ovary was found to be normal, but the left Fallopian tube could not be discerned. The right side ovary and tube were normal.

Postoperatively, the patient had to be transfused due to intraoperative blood loss. She was started on antibiotic therapy. The baby was well, weighing 2.5 kg, and showing no obvious external congenital abnormalities. Both the mother and the baby were kept in the hospital for 2 weeks postoperatively, during which the mother recovered well from surgery, with no signs of infection or bleeding. They were discharged home, with a follow-up appointment in one month. The mother and child have been on regular follow up. The child has shown normal developmental milestones till date (6 weeks after birth).

DISCUSSION

Primary abdominal pregnancy refers to an extra-uterine pregnancy where implantation of a fertilized ovum occurs directly in the abdominal cavity while the secondary abdominal pregnancy is a tubal pregnancy that ruptures with reimplantation within the abdominal cavity usually resulting in tubal or ovarian damage [3]. Our patient most likely had a secondary abdominal pregnancy, as the left sided Fallopian tube could not be identified intraoperatively.

A patient usually presents with signs of intra-abdominal bleeding due to separation of the placenta. Abdominal pain, painful fetal movements, abnormal presentation and uneffaced cervix should arouse suspicion of ectopic pregnancy, especially abdominal pregnancy.

Ultrasonography findings of intra-abdominal, extra-uterine fetus and placenta confirms the diagnosis. But even with routine ultrasonography examination, the diagnosis can be missed, especially in the later stages of pregnancy [4]. In a limited-resource setting, such as a field hospital in South Sudan, the diagnosis can be made intraoperatively.

Optimal management requires careful evaluation and planning. Generally speaking, for previable abdominal pregnancies,

i.e. prior to 24 week of gestation, immediate operative intervention is indicated, but for viable pregnancies presenting after 24 weeks of gestation, a more conservative approach is advocated, provided the patient can be under strict observation, preferably in a hospital [4].

Bleeding from the placental implantation site is the most serious and life-threatening complication of abdominal pregnancy. Usually complete removal of the placenta is not advised, and partial removal is only advised to control bleeding. Otherwise, it should be left in situ and is removed by involution and resorption. This is usually monitored by measuring the serum human chorionic gonadotropin levels on follow up [5]. In this case, clinical examination and monitoring of the haemoglobin level were the only means available for monitoring the patient.

For the newborn, congenital malformations are common, with reports of fetal malformations as high as 40%, with only 50% of these babies surviving the first week of life [6]. No investigations were possible in our case. The baby showed normal morphological appearance and reflexes on examination.

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CONFLICT OF INTEREST STATEMENT

None declared.

REFERENCES

1. Nwobodo EI. Abdominal pregnancy: a case report. *Ann Afr Med* 2004;3:195–6.
2. Badria L, Amarin Z, Jaradat A, Zahawi H, Gharaibeh A, Zobi A. Full-term viable abdominal pregnancy: a case report and review. *Arch Gynaecol Obstet* 2003;268:340–2.
3. Varma R, Mascarenhas L, James D. Successful outcome of advanced abdominal pregnancy with exclusive omental insertion. *Ultrasound Obstet Gynecol* 2003;21:192–4.
4. White RG. Advanced abdominal pregnancy: a review of 23 cases. *Iran J Med Sci* 1989;158:77–8.
5. Jianping Z, Fen L, Qiu S. Full-term abdominal pregnancy: a case report and review of the literature. *Gynecol Obstet Invest* 2008;65:139–41.
6. Teng H, Kumar G, Ramli N. A viable secondary intra-abdominal pregnancy resulting from rupture of uterine scar: role of MRI. *Br J Radiol* 2007;80:134–6.