

## A Live Baby Resulting Out of a Term Abdominal Pregnancy: A Case Report

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### Abstract

A 20 yr G2P1 from Kapilvastu, with a history of haemoperitoneum treated conservatively at 20 wks of gestation, presented with diagnosis of placenta previa and breech presentation at 38 weeks. At a planned elective caesarean, just on opening the abdomen, a healthy male baby was found lying in the abdominal cavity which weighed 3 kg, making thus a special case for publication.

**Key words:** Haemoperitoneum, placenta previa, abdominal pregnancy.

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### Introduction

Ectopic pregnancy is estimated to occur in 1 to 2 percent of pregnancies.<sup>1,2</sup> Over 90 percent are located in the fallopian tube, while the remainder implant in locations such as the abdomen, cesarean (hysterotomy) scar, cervix, and ovary.

Abdominal pregnancy refers to a pregnancy that has implanted in the peritoneal cavity, external to the uterine cavity and fallopian tubes. The estimated incidence is 1 per 10,000 births and 1.4 percent of ectopic pregnancies.<sup>3-5</sup> Potential sites include the omentum, pelvic sidewall, broad ligament, cul-de-sac, abdominal organs (eg, spleen, bowel, liver), large pelvic vessels, diaphragm, and the uterine serosa. Because of the variable location in the abdomen, abdominal pregnancy is associated with a wide range of signs and symptoms. In contrast to tubal ectopic pregnancies, abdominal pregnancies may go undetected until an advanced gestational age; some pregnancies go all the way to term. A high index of suspicion is important for making a diagnosis of abdominal pregnancy. The mainstay of treatment of advanced abdominal pregnancy is surgery, but the optimal approach has not been determined. The fetus can be delivered easily; the key issue is how to manage the placenta. An accurate assessment of the incidence of any outcome is difficult to determine since most reports consist of one or only a few cases gathered over a period of decades. Maternal death is usually the result of uncontrollable hemorrhage, and

has been reported in as many as 20 percent of cases. Fetal deformations and perinatal death occur more often than maternal death.

This case is reported for its rarity to be continued upto full term pregnancy and missing of diagnosis both clinically and with ultrasound but fortunate to have good maternal and fetal outcome.

### Case

A 26 yr. G2P1 with previous full term normal delivery 3 years ago from Kapilvastu district, gave history of sudden onset abdominal pain and fainting attack at 20 weeks gestation without any history of vaginal bleeding for which she was admitted and conservatively treated for haemoperitoneum for 12 days with peritoneal tube drain at Bhairahawa hospital and later followed in Tribhuvan University Teaching Hospital, Kathmandu. She had a total of 11 units of blood transfusion and series of ultrasound suggestive of 20 weeks intrauterine pregnancy associated with haemoperitoneum of unknown cause (fig 1).

She was then following up her antenatal visit at Butwal Hospital every 3-4 weeks without any other major complaints. At 38 wks. gestation she was advised to have an USG, which showed placenta previa and breech presentation with oligohydramnios (AFI=4cm). She was admitted in Lumbini Zonal Hospital

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**Fig 1.** 20-21wks pregnancy with multiple cystic spaces on the placenta.



**Fig 2.** Highly vascular placenta at laparotomy

on 31<sup>st</sup> Jan 2010 (2066/10/17<sup>th</sup>) for the plan of elective cesarean delivery. The next day on laparotomy, there was tense glistening and highly vascular placental tissue just below the peritoneum with adhesion all around. With an incision through placenta a healthy male baby delivered weighing 3 kg but the placental tissue was adherent to the omentum, bowel, and with abdominal wall letting us just partial removal of placenta (fig2). Haemostasis secured with multiple clamping and ligating. The fallopian tube, ovary and broad ligament on right side were all distorted, but on the left side it was normal. Uterus was just bulky and normal looking. Tubectomy done on both side as there is no desire to preserve fertility. A tube drain kept and abdomen closed. She had intra operative blood loss of about 1500ml and 2 units of transfusion.

Postoperative days were uneventful, drain out on 3<sup>rd</sup> day and had a total of 5 unit blood transfusion.

Stitches were out on day 7<sup>th</sup> and discharged on day 10<sup>th</sup> with follow up after a week. Her posttransfusion haemoglobin level was 9.2gm%. Urinary  $\beta$  hCG in dilution was decreasing over the subsequent days of postoperative period.

### Comment

Approximately 50% of ectopic pregnancies are missed at the time of initial presentation.<sup>6</sup> Abdominal pregnancy is potentially life-threatening, with maternal and perinatal mortality rates of 0.5% to 18% and 40% to 95%, respectively.<sup>7</sup> Some women present with an acute abdomen and shock due to severe intraabdominal hemorrhage from placental separation or rupture of maternal blood vessels or viscera. Similar, presentation

was there in our case at 20 wks. gestation, but due to lack of diagnosis of abdominal pregnancy, laparotomy was not performed and the condition resolved conservatively. The sonographic findings suggestive of abdominal pregnancy include the appearance of an empty uterus adjacent to the bladder, absence of a myometrium around the fetus, an unusual fetal lie, poor definition of the placenta, and relative oligohydramnios.<sup>8</sup> Computed tomography and magnetic resonance imaging can be useful for confirming the diagnosis, distinguishing anatomic relationships and potential vascular connections, and assessing placental adherence. In this case of abdominal pregnancy, even with series of ultrasound from 20 wks. onward, the suggestive findings were placenta previa with placental lakes, breech presentation and oligohydramnios but never thought of ectopic pregnancy. An elevated maternal serum  $\alpha$ -fetoprotein level has been associated with abdominal pregnancies, particularly those with more extensive visceral implantation, and should raise the suspicion for this diagnosis.<sup>9</sup> However, it was not tested in our patient.

If the abdominal pregnancy is diagnosed at an early gestational age (first trimester), operative laparoscopy is an option. Preoperative selective arterial embolization may help prevent hemorrhage during attempts to remove the placenta.<sup>10</sup> Rapid vascular control during major hemorrhage is easier to establish at laparotomy. In contrast to the tubal ectopic pregnancies, primary methotrexate therapy of early gestations has had minimal success. This may be due to the more advanced gestational age at which these pregnancies are discovered. Abdominal pregnancies, even when advanced, are interrupted at diagnosis as the potential for delivery of a healthy infant is poor and the risk of maternal complications is high. If the diagnosis is made late in pregnancy, a viable infant may be delivered via laparotomy. Expectant management to gain fetal maturity has been attempted and has been successful in a few cases.<sup>11</sup> If this is attempted, very close maternal monitoring is essential. One treatment option is to ligate the placental blood supply and then try to remove the placenta. This is generally difficult because the placenta can be implanted on one or more vital organs or large blood vessels and the normal mechanism to stem blood loss from the placental bed (contraction of the uterus) is absent. There is a significant risk of uncontrollable hemorrhage if the placenta is disturbed. Alternatively, the umbilical cord may be ligated and the placenta left in situ. The patient can then be followed without further intervention, or active intervention using arterial embolization or methotrexate can be instituted to hasten involution.  $\beta$  hCG levels decline in the first few months post-delivery, but it takes years for the placental mass to be absorbed. Long-term complications related to the inflammatory changes caused by the necrotic placenta include abscess formation, sepsis, delayed hemorrhage, intestinal or ureteral obstruction, fistula involving abdominal viscera, and wound dehiscence.<sup>12</sup> These complications occur despite loss of intraplacental vascular flow. In our case we have removed major portion of placental tissue so we did not consider methotrexate. Moreover it has been hypothesized that methotrexate administration causes rapid destruction of the abdominal placenta, resulting in accumulation of a large amount of necrotic tissue.<sup>12</sup> This provides a favorable medium in which colonic bacteria can grow, and increases the frequency of maternal complications. The rate of degeneration of the placenta in the absence of methotrexate administration is much slower, theoretically enabling resorption to take place slowly and with less risk of serious complications. However, methotrexate can be administered in select cases of retained placenta (ie, patients with persistently elevated

serum  $\beta$  hCG levels), with close monitoring for signs of infection.

**In conclusion**, although abdominal pregnancy is rare, awareness of this condition is very important whenever there is haemoperitoneum.

## References

1. Pregnancy-Related Mortality Ratios, United States 1991-1999. CDC. MMWR Vol 52, ss-2, February 21, 2003.
2. Ectopic pregnancy--United States, 1990-1992. MMWR Morb Mortal Wkly Rep 1995; 44:46.
3. Atrash HK, Friede A, Hogue CJ. Abdominal pregnancy in the United States: frequency and maternal mortality. *Obstet Gynecol* 1987; 69:333.
4. Dover RW, Powell MC. Management of a primary abdominal pregnancy. *Am J Obstet Gynecol* 1995; 172:1603.
5. Fisch B, Peled Y, Kaplan B, et al. Abdominal pregnancy following in vitro fertilization in a patient with previous bilateral salpingectomy. *Obstet Gynecol* 1996; 88:642.
6. Abbott J, Emmans LS, Lowenstein SR. Ectopic pregnancy: ten common pitfalls in diagnosis. *Am J Emerg Med* 1990; 8:515-522.
7. Strafford JC, Ragan WD. Abdominal pregnancy: review of current management. *Obstet Gynecol* 1977; 50:548-552.
8. Graham D, Johnson TR Jr, Sanders RC. Sonographic findings in abdominal pregnancy. *J Ultrasound Med* 1982; 1:71-74.
9. Shumway JB, Greenspoon JS, Khouzami AN, Platt LD, Blakemore KJ. Amniotic fluid alpha fetoprotein (AFAFP) and maternal serum alpha fetoprotein (MSAFP) in abdominal pregnancies: correlation with extent and site of placental implantation and clinical implications. *J Matern Fetal Med* 1996; 5:120-123.
10. Rahaman, J, Berkowitz, R, Mitty, H, et al. Minimally invasive management of an advanced abdominal pregnancy. *Obstet Gynecol* 2004; 103:1064.
11. Beddock R, Naepels P, Gondry C, et al. [Diagnosis and current concepts of management of advanced abdominal pregnancy]. *Gynecol Obstet Fertil* 2004; 32:55.
12. Cetinkaya, MB, Kokcu, A, Alper, T. Follow up of the regression of the placenta left in situ in an advanced abdominal pregnancy using the Cavalieri method. *J Obstet Gynaecol Res* 2005; 31:22.