



Full-term extra uterine abdominal pregnancy with healthy newborn: A case report and review of the literature

Mohammed Elkhair Bashir^{1*}; Awad Ali M. Alawad²

¹ Department of Obstetrics & Gynecology, Sharq alnile hospital, Sudan

² Department of Surgery, University of Medical sciences and Technology, Khartoum, Sudan

*Corresponding author E-mail: awadali82@hotmail.com

Abstract

Abdominal pregnancy is a rare form of ectopic pregnancy with very high morbidity and mortality for both the mother and the fetus. Diagnosis and management can pose some difficulties especially in low-resource centers. High index of suspicion is vital in making prompt diagnosis in such situations. A case of abdominal pregnancy that resulted in a live healthy newborn at a Regional Hospital in Somalia is presented.

Keywords: Abdominal Pregnancy; Ectopic; Live Baby; Placenta.

1. Introduction

Abdominal pregnancy is a very rare type of ectopic gestation, with its frequency been directly related to the frequency of ectopic gestation in the population About 2% of all pregnancies are ectopic and abdominal pregnancy where implantation occurs within the peritoneal cavity is much more uncommon, accounting for 1%-4% of all ectopic pregnancies (Zhang et al. 2008). Extra uterine abdominal pregnancy is frequently missed during antenatal care. This is a report of a full-term extra uterine abdominal pregnancy in multiparas women who likely had a ruptured ectopic pregnancy with secondary implantation and subsequently delivered a healthy baby.

It is estimated to occur in 10 out of 100,000 the diagnosis of such a condition is frequently missed during antenatal care, despite the routine use of abdominal ultrasound However, it is extremely important to detect an extra uterine abdominal pregnancy because the associated maternal mortality rate is estimated at about 5/ 1000 cases, which is approximately seven times higher than the estimated rate for ectopic pregnancy in general, and about 90 times the maternal mortality rate (Masukume et al. 2013). The clinical presentation of abdominal pregnancy is variable and physical examination by its self may be insufficient for the diagnosis. Clinical features such as persistent abdominal pain, painful fetal movements, weight loss, abnormal presentations, unaffected and displaced cervix, vagina bleeding and, palpation of an abdominal mass distinct from the uterus should raise the suspicion and sometimes presented as collapse. To assist in pre-operative diagnosis and reduce errors, an array of diagnostic procedures including oxytocin stimulation, abdominal x-ray, hysterosalpingography and ultrasound scan is a gold slandered method has been used (Baffoe et al. 2011). Recently, an ultrasound diagnosis aided by the balloon of a Foley's catheter in the uterine cavity was reported in Nigeria especially in early pregnancy (Ikechebelu et al. 2005).

2. Case report

A 25 -year- old lady, married for 10 years, lives in Mogadishu, was admitted in ibnu-sinaa specialized hospital on 17th May, 2014. She is gravida 5 Para 1+3, she had one alive baby, 7 years old outcome of normal vaginal delivery. In her past gynaecological history, she underwent curettage complicated by severe bleeding and received one unit of blood. She had regular antenatal care at health center. An abdominal ultrasound, done previously, showed a single viable fetus with multiple uterine fibroid at 38 wks pregnancy. She presented with non-specific abdominal pain dull in nature all over the abdomen.

Abdominal examination showed a symmetrical distention with multiple abdominal masses and audible fetal heart sounds. Investigations were normal and her blood group is B. She was counseled about her condition and put as elective cesarean section at 39 weeks after covering steroids. She underwent cesarean section on 18th of May 2014, abdomen was opened via midline infraumbilical incision under spinal anesthesia, anterior uterine wall was opened after bladder dissected downward, and baby is present in abdomen. Through the incision the term baby delivered who cried immediately and the placenta was found attached to whole abdominal cavity (Fig.1). Haemotaxis secured and the uterus was repaired. Abdominal layers were closed. She received 4 units of blood, on 20th she received 50 mg methotraxate i.m single dose. On 21th her bleeding profile deteriorated and PT & APTT were prolonged, she received 2 unit of fresh blood because there is no facility for fresh plasma, hemoglobin level at that time was 8 g/dl. On 29th she developed burst abdomen and then secondary suturing was done. Now she is quite well under antibiotics covering, dressing and her baby growing up well, Plan for 2nd dose of methotrexate on 18th of November.

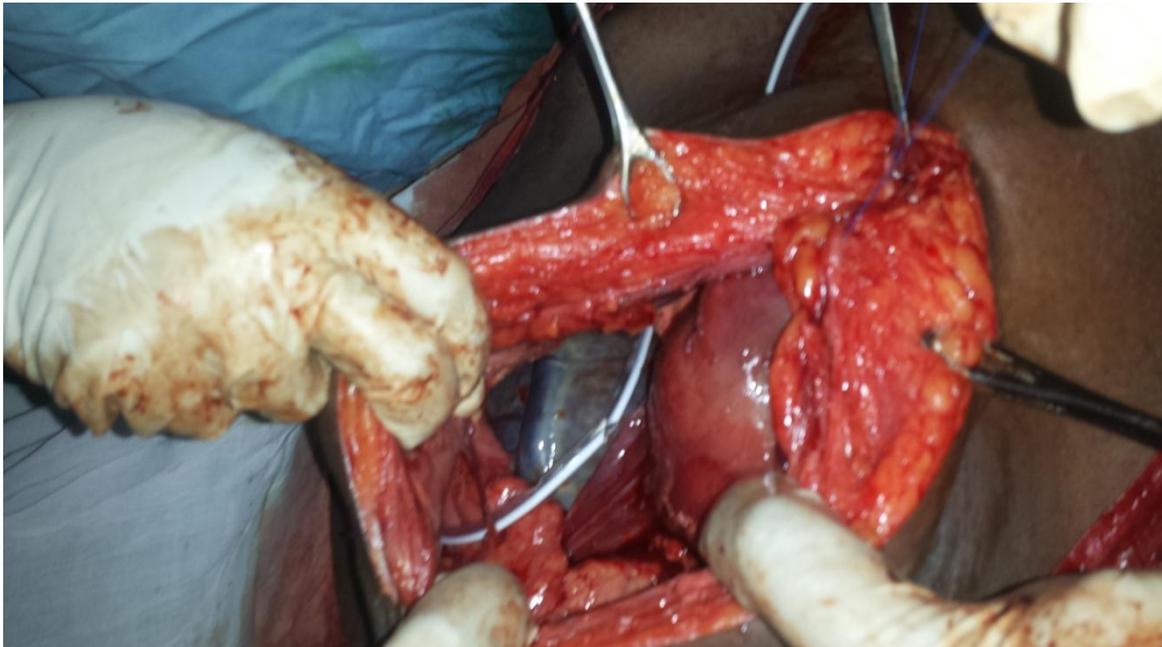


Fig. 1: Showed the Placenta in the Peritoneal Cavity with Small Uterus

3. Discussion

Abdominal pregnancy may account for up to 1.4% of ectopic pregnancies (Faller et al. 2006). Abdominal pregnancies refer to those with extrauterine implantations in omentum, vital organs, or large vessels. These pregnancies can go undetected until an advanced gestational age and often result in severe hemorrhage. Rates of maternal mortality have been reported as high as 20%. Advanced abdominal pregnancy carries a risk of hemorrhage, disseminated intravascular coagulation, bowel obstruction, and fistulae (Promsonthi & Herabutya 2007). Frequently, these pregnancies are encountered with a viable fetus, which complicates their management.

Implantations have been reported in the pelvic cul-de-sac, broad ligament, bowel, and pelvic sidewall. The site of implantation and availability of vascular supply are believed to be factors that may influence the possibility of fetal survival (Watanabe et al. 2009). Risk factors for abdominal pregnancy include tubal damage, pelvic inflammatory disease, endometriosis, assisted reproductive techniques, and multiparity (Lampe 2008). Abdominal pregnancies are believed to be a result of secondary implantation from an aborted tubal pregnancy or as a result of intra-abdominal fertilization of sperm and ovum. Patients with abdominal pregnancy often present with abdominal pain, vomiting, painful fetal movements, and less frequently vaginal bleeding. In 1942, Studdiford outlined his criteria for abdominal pregnancy: normal bilateral fallopian tubes and ovaries; absence of uteroperitoneal fistula; or presence of a pregnancy related to the peritoneal surface exclusively (Isah et al. 2008). Today, the diagnosis of abdominal pregnancy is often made using ultrasound and x-ray. The classic ultrasound finding is the absence of myometrial tissue between the bladder and pregnancy. Elevated serum alpha-fetoprotein has also been associated with abdominal pregnancy. Diagnostic laparoscopy may also be of value when there is a doubt about pregnancy location. In some cases, the diagnosis is not made until laparotomy. Magnetic resonance imaging (MRI) holds promise as a diagnostic tool (Tripathi et al. 2011).

Our knowledge of abdominal pregnancies comes largely from anecdotal case reports. Fisch et al reported a case of abdominal pregnancy after IVF in a patient with previous salpingectomy (Ikechebelu et al. 2005). Omental implantation has been described. Broad ligament pregnancies account for a small number of abdominal pregnancies. Deshpande et al reported a broad ligament twin pregnancy after IVF (Duhig et al. 2008). The role of

possible perforation with an IVF transfer catheter has been raised. There have also been reports of primary omental pregnancies (Watanabe et al. 2009). Splenic pregnancy has been reported in several cases. Kitade et al reported a first-trimester splenic pregnancy complicated by intra-abdominal hemorrhage and necessitating splenectomy (Tripathi et al. 2011).

The optimal treatment of abdominal pregnancy is unknown. Abdominal pregnancies frequently implant in vascular structures such as abdominal organs, omentum, or pelvic vessels. It has been reported that management of the placenta correlates well with maternal morbidity (Godyn et al. 2005). When possible, ligation of placental blood supply and removal should be attempted to reduce maternal complications. Alternatively, the umbilical cord may be ligated and expectant management, arterial embolization, or methotrexate used to facilitate involution. However, leaving the placenta in situ may lead to further complications such as infection, secondary hemorrhage, or intestinal obstruction. Laparoscopy has been used in the treatment of some early abdominal pregnancies. This conservative management should only be undertaken when the abdominal pregnancy has implanted on a less vascular surface. Olsen et al reported laparoscopic management of a broad ligament pregnancy without complication (Bukar et al. 2009). Primary methotrexate has been attempted for early gestations with minimal success (Masukume et al. 2013).

Hemorrhage is the most frequent problem encountered in treating abdominal pregnancy. Rahaman et al used preoperative selective arterial embolization to help prevent hemorrhage in an advanced abdominal pregnancy that was removed laparoscopically (Masukume et al. 2013). However, due to extensive vascular attachments, the placenta was left in situ and treated with methotrexate. Cardosi et al report a similar experience with selective arterial embolization used as a means of reducing intraoperative blood loss during removal of a 33-week abdominal fetal demise. Ginath et al reported a ruptured abdominal pregnancy successfully managed via laparoscopy, although the pregnancy was only 7 weeks gestation (He et al. 2010). Furthermore, there are reports of heterotopic abdominal pregnancies treated with laparoscopy with preservation of the intrauterine gestation.

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