



Case Report

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Abdominal pregnancy on uterine malformation type Unicornus uterus class II of ASRM about a clinical case at the Maternity ward of the General Hospital of Kinshasa, The Democratic Republic of Congo

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Abstract

Abdominal pregnancy is a rare event and occurs in approximately 1 percent of extra-uterine pregnancies. Its frequency is estimated at 1 per 10,000 live births. It is associated with a high fetal mortality rate (40-95%) and significant maternal mortality. The association of uterine malformation and ectopic pregnancy type cornuale is described in the literature, but the abdominal type appears to be exceptional. The authors describe a case of abdominal pregnancy associated with uterine malformation type unicornus uterus class II of ASRM (unicornuate uterus with a rudimentary controlateral uterus), of which the diagnosis was made when a complication occurred.

Keywords: Abdominal Pregnancy, Uterine Malformation, General Hospital, Kinshasa.

INTRODUCTION

Vaginal or uterine malformations occur in almost 3-4% of the female population [1]. Many of these are asymptomatic and the diagnosis is made at random during an examination for another purpose [2].

Thus, it is not unusual to make the diagnosis of a malformed uterus during a first pregnancy check-up or to discover during a vaginal delivery the presence of a previously unrecognized vaginal septum. If many of these defects are asymptomatic, they should be considered in all adolescent girls who experience dysmenorrhea, primary amenorrhea, pelvic pain, or dyspareunia.

Similarly, it is essential to look for uterine malformation at a patient with a recurrent miscarriage, late miscarriages or preterm labor, as well as in patients who are undergoing reproductive health care.

CASE REPORT

We report a case of abdominal pregnancy on ground of uterine malformation unicornuate uterus type with a rudimentary controlateral uterus. The patient was a 19-year-old primigravida transferred from a peripheral Medical Centre for abdominal pain and dizziness. Prior to her transfer, the patient received a 400 milliliters of Heamacel, Glucose liquid 5% and 4 amp of Spasfon. The persistence of the above-mentioned signs and the anemia lead to a transfer at 9:30 p.m., i.e. 14 hours after the onset of the symptoms.

When admitted at the emergency ward, we found that the pregnancy was 21 weeks and 2 days old and the beginning of prenatal cares reported by the patient for which she had no documentation. Also, no ultrasound was performed to confirm this pregnancy.

The clinical examination was marked by physical asthenia, poorly colored conjunctiva, tachycardia at 115 bits per minute, BP 91 / 100 mmhg, eupnea at 22 cycle/min, O₂ saturation at 99%, the abdomen was bloated, distended, tender in a diffuse manner with a clear dematitide in the flanks.

The team suspected hemoperitoneum on ruptured ectopic pregnancy complicated by anemia.

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The hemoperitoneum was confirmed by transabdominal ponction, which brought 5 milliliters of uncoagulated blood. The obstetrical ultrasound allowed the demonstration of a normal volume uterus with a virtual cavity, the presence of a dead fetus in its sac located in the peritoneal cavity and peritoneal collection with subdiaphragmatic filling.

We indicated a laparotomy, which allowed us to make the following findings after rachianaesthesia:

- A hemoperitoneum estimated at 1750 milliliters ater aspiration + blood clots of about 100 grams;
- An unicornuate uterus of ASRM class II of normal size with tube and ovary on the left side, macroscopically healthy, connected by a ligament to a rudimentary right uterus with a macroscopically healthy tube and ovary;
- A gestational sac containing a dead fetus with the placenta inserted into this rudimentary uterus, the bottom of which was eroded corresponding to the site of the trophoblastic invasion of placental implantation.

As an act we performed a hemi-hysterectomy by removing the homolateral tube and the gestational sac with preservation of the right ovary. The patient benefited from a unit of the globular, the blood pressure after the operation was 110/80. We submitted the patient for histopathological analysis, unfortunately, the patient was uneducated and financially unable to pay fot it, so threw away the sample.

The operative procedures were simple. The Uro-Scan performed at 15 days postoperative did not reveal any renal or urinary tract abnormalities.

DISCUSSION

Abdominal pregnancy (AP) is defined as the implantation and development of the fertile egg in the peritoneal cavity. There is a secondary form, the most common, related to a tubo-abdominal abortion or tubal extrauterine pregnancy rupture (EP) [3], and a primary form, which is rare, as it must meet the Suddiford criteria [4], which are as follows: normal fallopian tubes and ovaries, absence of utero-peritoneal fistula and exclusive contact of the egg with the peritoneal surface.

In our patient, a gestational sac containing a dead fetus with the placentas inserted at fundal part of the rudimentary corne with unicornuate uterus, macroscopically healthy fallopian tubes and ovaries, the placenta has eroded a large portion of the rudimentary corne corresponding to the location of the placental invasion, which allowed the primary form to be maintained.

The latter remains a rare variety of ectopic pregnancy [5]. We often find out risk factors such as infertility, presence of an intrauterine device, history of uterine trauma, termination of pregnancy by aspiration, uterine scar and genital infections [6].

In the reported case, no risk factors were found. The preoperative diagnosis of AP is difficult, with non-specific symptoms [6]. It is important to note that more than 50% of uterine malformations will remain asymptomatic during a pregnancy.

For the others, uterine malformation will be a source of pregnancy at risk and obstetrical complications [2]. In our patient, the uterine malformation was asymptomatic and could only be detected only during the laparotomy performed for the complication of the ectopic pregnancy (hemoperitoneum). It seems, for some authors, that the existence of continous abdominal pain in the context of amenorrhea is a major warning sign to suspect an AP. Sometimes, AP can be revealed by hemoperitoneum, peritonitis, or intestinal obstruction [7]. In our

patient, AP was revealed by a hemoperitoneum and the uterine malformation was discovered intraoperatively.

In this case, the difficulty of diagnosis was due to the lack of prenatal cares followed in a small health center located in a rural area in the city of Kinshasa due to the patient's low socioeconomic status. Ultrasound is of vital importance in view of the clinical polymorphism of the AP. In fact, it allows in more than 50% of cases to make the preoperative diagnosis if we have an empty uterus, an absence of a uterine wall around the fetus which is in direct contact with the intestinal echoes [8].

We performed an emergency ultrasound in this case, which allowed us to show a normal volume uterus with a virtual cavity, the presence of a dead fetus in his amniotic sac located in the peritoneal cavity and a peritoneal collection with sub-diaphragmatic filling. To date, the Abdominal Magnetic Resonance Imaging (MRI) is the first line of diagnosis, which shows an empty uterus, a fetus in the abdominal cavity that is not circumscribed by myometrial tissue, and the extrauterine placental location, which provides valuable preoperative information [6]. In our patient, AP was diagnosed on ultrasound and the uterine malformation was discovered by chance.

The injected uro-scanner was performed preoperatively to exclude a malformation of the urinary tract, which has been described in association with the uterine malformation in almost 30% of cases according to the literature [2], and fortunately, this has not been proven to be associated with any urinary tract malformation. (Figure 5). The treatment of AP is almost always surgical. However, the surgical procedure can be postponed until after the fetal viability period, provided that maternal and fetal monitoring is reinforced [8]. In our patient, an acute abdomen with hemoperitoneum was an emergency that required us to perform a laparotomy. Complete delivery should be the ideal if it is easily performed after inventory of the placenta's relationship to pelvic and abdominal organs. The placenta may be left in situ after clamping the Cord where it is in close contact with the placental surface. Monitoring of resorption can be done by Doppler ultrasound and or by plasmatic beta-HCG assay [9].

For this case, a block excision of the rudimentary uterus with the removal of the tube and placenta which was inserted, the homolateral ovary let in place. Since the post-operative procedures were simple, a program for short-term follow-up was planned in our infertility unit.



Figure 1

- : Rudimentary corne eroded by trophoblastic invasion, placental implantation site
- : Right ovary
- : Ligament linking the unicornuate uterus and the cornea.
- : Unicornuate uterus

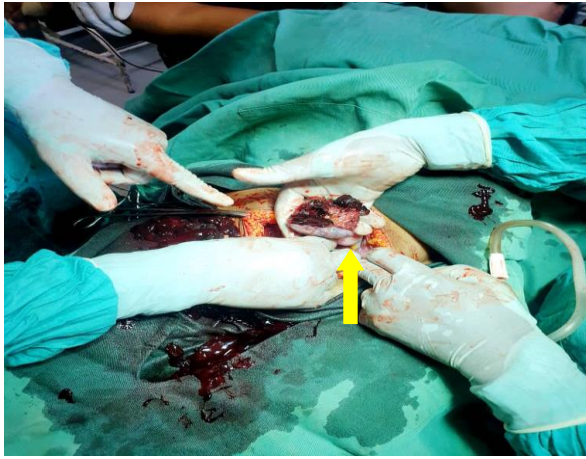



Figure 2

 : Rudimentary corne eroded by trophoblastic invasion, site of placental implantation

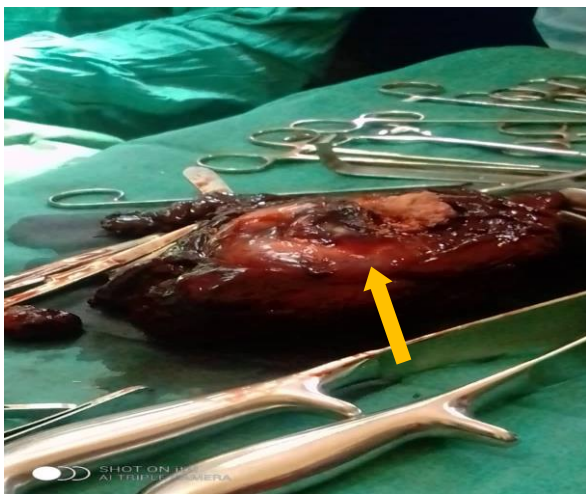



Figure 3

 : Placenta with fetus in its gestational sac surrounded by blood clots

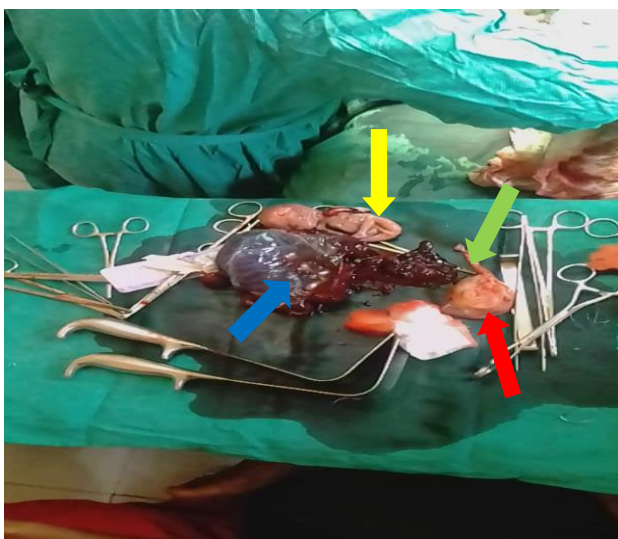






Figure 4

 : Placenta on the fetal surface
 : Rudimentary corne
 : Right tube with all its different parts
 : Dead fetus

CONCLUSION

This case report shows the possible association of a primary AP with a uterine malformation such as ASRM type II unicornus uterus and emphasizes the difficulties of early diagnosis in a low-income place.

Conflicts of interest

None declared.

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