Secondary Abdominal Pregnancy after Short Interval, Recovering from a Cesarean Delivery

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ABSTRACT
Abdominal pregnancy is a rare condition related with non negligible risks to mother and foetus. It can occur primarily or secondary to tubal abortion or rupture with implantation of the conceptus in the peritoneal cavity. We present a case of a 39 years old woman in her second pregnancy, with 33 weeks amenorrhea, which was admitted with abdominal pain and blackish bleeding. The ultrasonography revealed a foetal death located in the abdomen and the CT scan confirmed the diagnosis. The patient was successfully managed.

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Introduction
Abdominal pregnancy is one of rare type of ectopic pregnancy which is allied with a high risk of morbidity and mortality for both mother and foetus. Most of the time, the abdominal pregnancy is a secondary one and happens after spontaneous abortion of tubal pregnancy or ruptured intrauterine pregnancy, especially with short interval between births. We report this case for raising awareness about this rare pregnancy that could be seen more often in the future because of the grown rate of the caesarean.

Observation
Our patient is a healthy 39 years old Moroccan woman, G2P2, who had a caesarean section for the first birth with a short interval between births estimated at 4 months.

The pregnancy was not monitored by an obstetrician. The patient consulted in the UR at 33SA for diffuse abdominal pain with minimal blackish bleeding. Clinical examination showed a patient in good general condition, apyretic and its conjunctiva were normally colored. The abdomen was enlarged and deformed with perception of the foetal cephalic pole on the right flank and its caudal pole at the level of the left flank. The gynaecological examination found a uterus of subnormal size and a closed cervix. The intra abdominal pregnancy was diagnosed with the use of abdominal ultrasound. The uterus was slightly increased in size with an empty cavity line. The foetus with absence of cardiac activity had the head at the right flank. The placenta was outside the uterine cavity, at the pelvic level above the uterus which was immerse in peritoneal effusion. A ct-scan confirmed the diagnosis, showed the overlapped cranial bones, the location of the placenta and their close rapports with right external iliac vessels. The surgery went under general anaesthesia. The neonate and the placenta were delivered easily.

Figure 1. CT-Scan sagittal view of uterus (star) seen empty and inferior to foetus (arrow). Placenta is superiorly implanted (triangle).

Figure 2. Coronal CT-scan view of the abdomen. The foetus is extra-uterine, located in the abdominal cavity.
The placenta has a large base of implantation along the anterior uterine fundus.

Discussion

Intra-abdominal pregnancy is unusual sort of ectopic pregnancy in which the foetus develops inside the abdominal cavity. It appears that Abulcasis is the first to describe a case of abdominal pregnancy in the tenth century (1). This case is unusually a result of reimplantation of the conceptus in the vital organs, onto omentum or the large vessels. The anterior abdominal wall and other unusual sites can be places of placental attachment. Actually, many risk factors such as endometriosis, pelvic inflammatory disease, tubal damage, assisted reproductive techniques and multiparity (2) (3) are associated with abdominal pregnancy. Abdominal pregnancy can rarely be the result of primary peritoneal implantation, or occurs secondarily after spontaneous abortion of tubal pregnancy or rupture intrauterine pregnancy (4). Abdominal pain is the common sign. But, there is less chance that symptoms have to do with placental site attachment to the bowel or bladder obstruction as well. Such pregnancies can hide themselves, but once they reach an advanced gestational age, they cause an intense haemorrhage (5). In fact, abdominal pregnancy casualties are higher than those of tubal pregnancy. We can name several associated morbidities like: Bowel obstruction, disseminated intravascular coagulation, haemorrhage, and fistulae formation caused by foetal bones protruding through fine amniotic membranes. Because of severe oligohydramnios, malformations can develop. Examples of malformations in question are: facial asymmetry, flattening of the head and thorax, malformation of limbs and torticollis (5). A preoperative diagnosis can not be done depending just on clinical history and physical examination but also on imaging. Ultrasonography is the number one means to diagnose abdominal pregnancy. It highlights denoting abdominal pregnancy include:

- Foetus being seen outside the uterine cavity.
- Lack of the uterine wall between bladder and foetal parts close to the maternal abdominal wall.
- Abnormal location of placenta outside the uterine cavity.

Sonography is beneficial to assess foetal malformations which are often related to abdominal pregnancies (6) (7). MRI can be a useful imaging modality serving to confirm the diagnosis, describes precisely the definite anatomical localization of placental tissue, foetal parts, and the adhesions to the uterus as well. Such data will definitely have an effect on imaging and directing a surgery preparation or planning (8). It can be helpful to follow up the placental involution (9). In our case, we used ct-scan because the cardiac activity was absent. Preoperative angiogram could be helpful in identifying sources of vascular supply to the placenta and embolize vessels hard to ligate operatively. If the placenta should not be eradicated during laparotomy, postoperative embolization of feeding arteries maybe the option to manage hemorrhage from adherent placenta (7).

The direction of abdominal pregnancy mainly relies on these: maternal complications, foetal viability, foetal gestational age, presence of foetal congenital abnormalities, location and adherences of placenta. Most often, surgical intervention here is imperative without consideration of foetal viability. The way to direct the placenta is still an ongoing issue that is open to discussion (10) (2).

Conclusion

In view of the importance morbidity and mortality of intra abdominal pregnancy, especially the increase risk of intra operative haemorrhage, the early diagnosis by abdominal ultrasonography and MRI and multidisciplinary treatment should be instituted.

Reference