

Early abdominal pregnancy: Diagnostic difficulties through a case.

SB A MAALOUM ,R TAYEB ,N ZERAIDI,A LKHDAR,A BAYDADA .

Service de gynécologie-obstétrique et l'endoscopie gynécologique maternité souissi, CHU Rabat

Abstract : *Abdominal pregnancy is an extremely rare entity of ectopic pregnancies. It is more common in developing countries. We report the case of an early abdominal pregnancy in a patient admitted for vomiting with abdomino-pelvic pain at 08 weeks of amenorrhea, lived at the souissi reference maternity hospital in Chu Rabat. Clinical signs and physical examination contributed little to the diagnosis, which was strongly suspected on ultrasound and confirmed during surgery. Our objective is to highlight the importance of ultrasound for any admission in the first trimester of pregnancy by insisting on the individualization of the uterine wall during its realization.*

Keywords: *Early abdominal pregnancy.*

INTRODUCTION :

Abdominal pregnancy is one of the varieties of ectopic pregnancies which corresponds to the implantation and primary or secondary development of the fertilized egg in part or in whole in the abdominal cavity.

It constitutes 1.4% of ectopic pregnancies (EGU) [1]. Its prevalence varies by country.

A distinction is made between early abdominal pregnancy and advanced abdominal pregnancy diagnosed after 20 weeks of amenorrhea [2]. It occurs in the majority of cases in underdeveloped countries where medicalization is still insufficient [3]. The clinical signs being polymorphic and nonspecific, its diagnosis is often based on ultrasound, The treatment is always surgical, the fetal prognosis is often very reserved and the maternal prognosis most often depends on the precocity of the intervention and the intervention itself. Our objective is to highlight the importance of the individualization of the uterine wall during this examination in the first trimester of pregnancy in order to make an early diagnosis.

OBSERVATION :

This is a 20-year-old patient, 2nd step 2nd parent, of low socio-economic level with a history of recurrent genital infection poorly treated. She was admitted to the gynecology-obstetric emergency maternity souissi CHU Rabat for pregnancy-induced vomiting with persistent abdomino-pelvic pain; associated with metrorrhagia at 08 weeks of amenorrhea (SA). The clinical examination finds the patient hemodynamically and respiratory stable, afebrile with hypogastric tenderness on the abdominal examination, the obstetrical examination is unremarkable.

Ultrasound, performed abdominally, found a normal-sized uterus with thickened endometrium, empty, presence of an ectopic gestational sac with embryo and positive cardiac activity LCC=08SA associated with moderate pelvic effusion. Abdominal location was suspected by identification of the anterior uterine wall next to the gestational sac (see Figure 1). The patient had undergone surgical treatment. The mini emergency laparotomy had confirmed the diagnosis by highlighting the gestational sac in the peritoneal cavity attached to the greater omentum on its distal part, the fallopian tubes and the left ovary are intact, right ovary presents a functional cyst that has been aspirated, resection of the EUG with part of the omentum by eliminating the trophoblastic tissue in its entirety with ligation of the omentum.

DISCUSSION :

Abdominal pregnancy is a diagnostic emergency because it can be life-threatening in the event of a rupture.

Frequency :

The frequency of abdominal pregnancy is influenced by the risk factors for ectopic pregnancy: genital malformations, sequelae of specific or non-specific genital infections, sequelae of tubal surgery and low socioeconomic background [4]. The high frequency in developing countries is linked to two factors depending on the socio-economic level of the country: the incidence of genital infection and insufficient monitoring of pregnancy [7].

Our patient had a history of poorly treated genital infection..

As a result, it remains exceptional in developed countries (from 1/10,000 to 1/15,000 deliveries) on the other hand more frequent in Third World countries: 1/2000 [4]. In Morocco: 1/11,250 deliveries [9].

Pathogenesis:

There are 2 types of abdominal pregnancies related to pathophysiological mechanisms [6-12]:

Secondary abdominal pregnancies, the most common, are due to tubo-abdominal abortion, ruptured tubal pregnancy, or migration of an intrauterine pregnancy through a hysterectomy breach, uterine perforation or of a rudimentary horn. Primary pregnancies, which are rare, are due to the implantation of the egg in the peritoneal cavity by delay in egg capture, They meet the diagnostic criteria of Studdiford described in 1942 [10]: tubes and ovaries intact without old or recent lesion, absence of utero-peritoneal fistula, presence of a pregnancy in exclusive relation with the peritoneum which forms the reflected decidua of the 'egg. The classification of abdominal pregnancies into primary and secondary is purely didactic and has no influence on diagnostic or therapeutic management [4].

Our case can be classified among primary abdominal pregnancies since the pregnancy is very early with an intact uterine body and fallopian tubes

Diagnostic :

The diagnosis of uncomplicated abdominal pregnancy is difficult and constitutes an intraoperative finding in 40 to 50% of cases [12]. The clinical expression of abdominal pregnancy is variable, depending on the degree of anatomical distortion it creates, the site of placental insertion and the term of pregnancy [13]. Au premier trimestre, le diagnostic est difficilement orienté par la clinique car elle est souvent frustrée et non spécifique : douleur abdominale, vomissement incoercible, constipation, métrorragie (rarement rapportée dans la littérature en cas de localisation abdominale) ... [5, 6].

At a more advanced term, the clinic is more revealing: fetal parts and fetal movements perceived directly under the maternal skin, an often vicious and high presentation, a long and toned cervix often fixed under the pubic symphysis, digestive disorders such as of sub-occlusion, abdominal-pelvic pain concomitant with fetal movements, fundal height not proportional to the age of pregnancy [7, 8]. The diagnosis is then based on ultrasound, especially at an early term [7, 6] by individualizing the uterus, clearly highlighting all of its walls, as well as the ovaries and fallopian tubes so as not to pass next to this diagnosis as in our case. By abdominal route, an anterior placenta can be a source of diagnostic error. Indeed, it can be confused with the thickness of the uterine wall separating the maternal bladder and the fetus. The endovaginal route is more effective in diagnosing asymptomatic abdominal pregnancy, particularly at an early term [6, 11]. In our patient, the orientation of the diagnosis is difficult because the term of the pregnancy is very early and the clinical signs are non-specific. But the ultrasound allowed us to strongly suspect the diagnosis.



Figure 1: Ultrasound image of abdominal pregnancy located above the uterus (abdominal approach)

At an advanced stage of pregnancy, an abdominal X-ray without preparation can help in the diagnosis if ultrasound examination is not possible by specifying the position of the fetal poles in relation to the intra-abdominal organs [7]. Other radiological studies such as MRI and CT are useful in later stages to determine the area of placental insertion [14].

Supported :

The treatment of abdominal pregnancy is surgical, at best by laparotomy, for better control of the haemorrhagic risk,

Some authors recommend medical termination of pregnancy once the diagnosis has been made, regardless of fetal status, given the unpredictable and serious nature of maternal complications that can occur at any time [16,17]. For others, a conservative approach to pregnancy can be proposed [18-19] depending on the term and fetal viability, provided there is no major congenital malformation, a placental insertion site at a distance from the liver and of the spleen, maternal clinical stability and close monitoring of the pregnancy in good consultation with the parents informed of the risk [17].

In our case, abdominal pregnancy is strongly suspected on ultrasound with confirmation of the diagnosis during surgery by laparotomy (see Figure 2).



Figure 2 : grossesse abdominale au niveau grand omentum (laparotomie)

Pronostic :

The maternal prognosis depends on the precocity of the diagnosis and the therapeutic attitude [3]. Maternal mortality varies from 0% to 18%, mainly due to bleeding and infectious complications [5]. The prognosis was favorable in our patient.

CONCLUSION :

Diagnosing an abdominal pregnancy is often difficult. The identification of the uterine wall during the realization of the ultrasound of the first trimester of pregnancy is an asset allowing to avoid any delay in diagnosis and therefore in management.

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