

Heterotopic Pregnancy as Revealed by a Delayed and Ruptured Left Ampulla Pregnancy: A Case Study at the Regional Hospital of Ngaoundere-Cameroon

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Abstract: Heterotopic pregnancy represents an unusual affection characterized by the coexistence of both intra and extra-uterine pregnancy in the same patient. We report a case study occurred in a 32 years old woman and revealed by a clinical table of abdominal mass syndrome. She was requested an ultrasound that allowed the diagnosis of a delayed abdominal pregnancy, but did not show the intra-uterine gestation. Therefore, a left annexectomy was carried out and led to a spontaneous abortion. The particularities of diagnosis, the etiopathogeny and treatment principles are discussed based on literature review.

Key words: Hererotopic pregnancy • Surgery • Tocolysis

INTRODUCTION

Heterotopic pregnancy (HP) or simultaneous pregnancy (SP) is defined as the association of intra-uterine pregnancy (IUP) and extra-uterine pregnancy (EUP) in the same patient [1]. Formerly rare, the frequency of this SP has steadily increased with the appearance of medically assisted reproduction, or ovulation induction technics [2]. The diagnosis is difficult and occurs very late [3]. We report a case study of an HP in a 32- years-old patient admitted to the hospital for a delayed abdominal pregnancy. After observations, a literature review was searched in order to better understand the epidemiological aspects, diagnosis and therapeutic of this unusual and cheated clinical pathology.

MATERIALS AND METHODS

Case Report: Madam AOS, 32- years- old was admitted to the hospital for a delayed abdominal mass syndrome. She has no trouble in the stomach, nor associated metrorragy. In her precedings, she was nullipara, without abortion notion.

Examination at the entrance showed a general normal state. The stomach was distended (Figure 1A) without peritoneal irritation signs, nor occlusive syndrome.

The ultrasound revealed a delayed abdominal pregnancy of 26 weeks and no sign of IUP. A scheduled laporotomy indicated a late and undisrupted left ampulla pregnancy(Figure 1B, C, D). with a fetal deformation (Figure 1E) and an inserted placenta (Figure 1F). on the left annex of the gestated uterus. A left annexectomy was carried out with little manipulations of the uterus. The controlateral annex had no particularity. A tocolysis was performed during the first week post surgery. Unfortunately, the operation led to a spontaneous abortion two weeks later.

DISCUSSION

The association of extra and intra-uterine pregnancy is a particular form of twin pregnancy, also called ditopic or heterotopic, that was first described in 1708 by Duvernet [4]. It is an unusual pathology, which frequency is located at between 1/10000 and 1/30000 within the population in general [2]. Presently, this frequency is raising up in developing countries due to increased rate of acute salpingitis linked to untreated sexually transmitted infections and septic abortion on one hand and on the other, to medically assisted treatment such as induction of ovulation and *in vitro* fertilization in developed countries [6]. To the best of our knowledge,

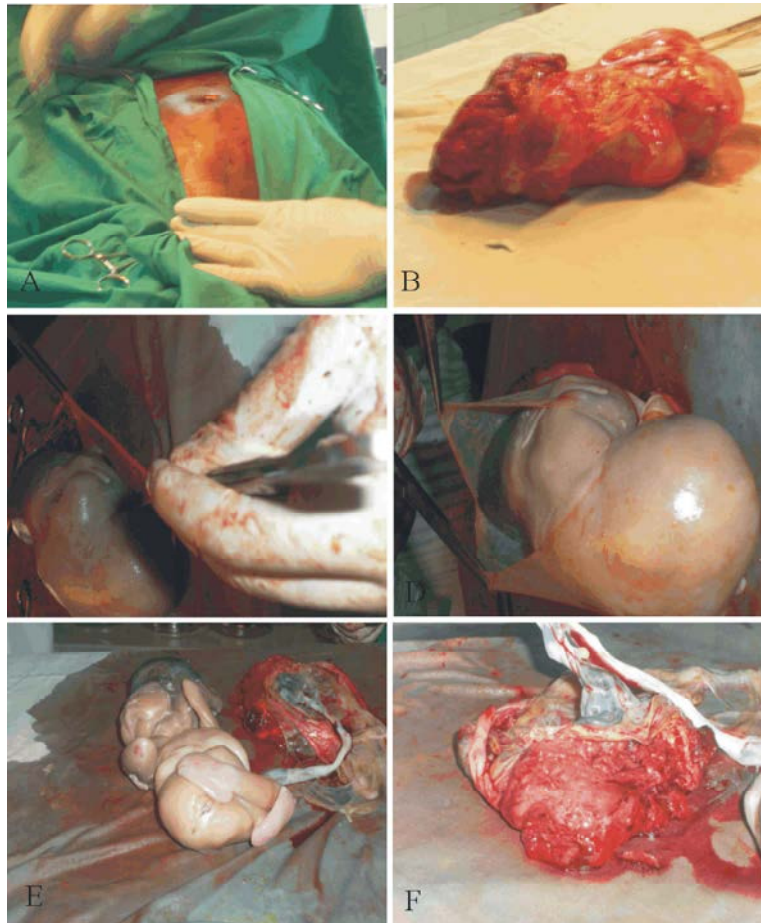


Fig 1: Steps in the surgery on process: Abdominal distention (A); Mass (B); tubal membrane (C); Amniotic membrane (D); Deformed fetus (E); placenta (F)

no such a study on the frequency of this pathology has been investigated in the country. In addition, the previous EUP or abortion constitutes other risk factors [7]. Despite the frequent use of ultrasound, the diagnosis difficulties of this pathology are still a reality as confirmed by our observations. The diagnosis is very easy when clinical signs of EUP are early detected: abdominal-pelvic pain in 82.7% of cases and metrorrhagies in 50% of cases [8]. These signs could therefore, be confused to other pathologies, leading to late diagnosis and treatment. Nevertheless, a transvaginal ultrasound could early allow detection of the pathology in 88.9% of cases, when an intra or extra-uterine egg is revealed [9].

The indications of limited medical treatment are closely related to hemodynamic stability [10]. However, operations have been indicated as standard treatment in recent literature [2]. Moreover, if the hemodynamic situation is precarious due to disruption of the ectopic pregnancy, it is requested to overcome through

laparotomy. This operation could not perturb the development of IUP, considering that manipulations of uterine are limited and that anesthesia takes place for a short time; therefore, the prophylactic tocolysis would not be necessary [11]. Despite the pre-surgery care taken for this IUP, a spontaneous abortion occurred. In contrast, maternal prognosis was similar to that of the simple EUP with a mortality rate lower than 1% [12].

CONCLUSION

If HP is rarely encountered in our country, its incidence is increasing in developed countries due to development of medically assisted reproduction. Our observations illustrate the diagnosis difficulties and the complexity of precautions taken in particular for IUP. A following up of pregnant women should be taken into consideration to guaranty a complete pregnancy without associated risks.

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