## Case report

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

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#### ABSTRACT

Heterotopic pregnancy (HP) or simultaneous pregnancy is defined as the association of intra-uterine pregnancy (IUP) and extra-uterine pregnancy in the same patient. The diagnosis is difficult, and occurs very late. The main objective of this study was to detect a case study of an HP in a 32 years old patient admitted to the hospital for a delayed abdominal pregnancy. After observations, the patient who was nullipara with no abortion notion had a distended stomach without peritoneal irritation signs, nor occlusive syndromes. Results of the ultrasound revealed a delayed abdominal pregnancy of 26 weeks old, and no sign of IUP. A laporotomy indicated a late and undisrupted left ampulla pregnancy with a fetal deformation, and an inserted placenta on the left annex of the gestated uterus. A tocolysis realized during the first week post-surgery led to a spontaneous abortion two weeks later. Based on diagnosis difficulties, this study suggests a following up of pregnant women to guarantee a full term pregnancy without associated risks.

**Key words:** Heterotopic pregnancy, extra-uterine pregnancy, left annexectomy, etiopathogeny.

#### **INTRODUCTION**

Heterotopic pregnancy (HP) or simultaneous pregnancy (SP) is defined as the association of intrauterine 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, as well as diagnosis and therapeutic of this unusual and cheated clinical pathology.

## CASE REPORT

Madam AOS, 32 years old was admitted to the hospital for a delayed abdominal mass syndrome. She

#### RESUME

La grossesse hétérotopique se définit par une association d'une grossesse intra-utérine et d'une grossesse extrautérine chez une même patiente. L'objectif de cet article est de décrire un cas de grossesse hétérotopique chez une patiente de 32 ans admise dans le service pour grossesse abdominale arrêtée. La patiente était nullipare, sans notion d'avortement, avec un abdomen distendu sans signe d'irritation péritonéal ni de syndromes occlusifs. L'échographie a révélé une grossesse abdominale arrêtée de 26 semaines tout en méconnaissant une grossesse intrautérine. Une laparotomie a permis de découvrir une grossesse ampullaire gauche tardive non rompue avec déformation du fœtus et insertion du placenta sur l'annexe gauche l'utérus était gravide. Une tocolyse réalisée pendant la première semaine post-opératoire a conduit une fausse couche spontanée dès la deuxième semaine après l'intervention. Sur la base du diagnostic difficile, cette étude suggère un suivi rigoureux et rapproché des femmes enceintes pour garantir une grossesse à terme sans risque. Mots\_clés: Grossesse hétérotopique, grossesse extrautérine, annexectomie gauche, étiopathogénie.

had no trouble in the stomach, nor associated metrorragy. In her past history, she was nulliparous, without abortion notion.

Examination at the entrance showed a general normal state. The stomach was distended without peritoneal irritation signs, nor occlusive syndromes. The ultrasound revealed a delayed abdominal pregnancy of 26 weeks old, and no IUP signs. A scheduled laparotomy indicated a late and undisrupted left ampulla pregnancy with a fetal deformation (Figure 1A), in addition to an inserted placenta on the left annex of the gestated uterus (Figure 1B). A left was carried out with little annexectomy manipulations of the uterus. The control of the lateral annex had no particularity. A tocolysis realized during the first week post-surgery indicated a spontaneous abortion two weeks later.



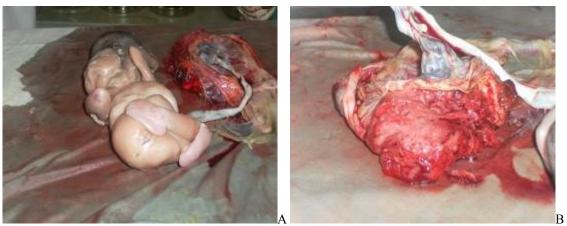


Figure 1. Steps in the surgical process: deformed fetus (A); placenta (B)

## 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 rising up in developing countries due to increased rate of acute salpingitis linked to untreated sexually transmitted infections and septic abortion on one hand, and to medically assisted treatment such as induction of ovulation and in vitro fecundation in developed countries on the other hand [6]. To the best of our knowledge, no such a study on the frequency of this pathology has been investigated in the country. In addition, 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 such as abdominal-pelvic pain in 82.7% of cases and metrorragies in 50% of cases are early detected [8]. These signs could therefore, be confused to other pathologies, leading to late diagnosis and treatment. Nevertheless, a trans-vaginal 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, surgeries have been indicated as standard treatment in recent literature [2]. Moreover, if the hemodynamic situation is scarcely due to disruption of the ectopic pregnancy, it is wise 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. Hence, the prophylactic tocolysis would not be necessary [11]. Despite the pre-surgery care taken for this IUP, a spontaneous abortion had occurred. Unfortunately, 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 challenges and the complexity of precautions taken in particular for IUP. A following up of pregnant women should be taken into consideration to guarantee a complete pregnancy without associated risks.

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