

## Ruptured cornual pregnancy: About 2 cases

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**Abstract:** Cornual ectopic pregnancies are rare, they represent 2% of ectopic pregnancies. Its management is poorly codified and often guided by the clinical situation. The risk of rupture with severe bleeding remains high especially when the diagnosis is late. The treatment is often surgical, though in some cases, medical treatment by methotrexate has been described.

**Keywords:** Cornual pregnancy, Ectopic pregnancy, Pelvic ultrasound, Surgical treatment.

### Introduction

Ectopic pregnancies are a feared cause of first trimester bleeding. They correspond to implantation and the development of the pregnancy outside the uterine cavity.

Cornual pregnancy is defined by the development of a pregnancy in the uterine horn. It is a rare form of abnormal uterine pregnancy. Its incidence is 2%. Its major risk is uterine rupture which can endanger the maternal vital prognosis. We report 2 cases of cornual pregnancies treated in our department.

### Patients and cases:

#### Case 1:

This is a 35-year-old patient, fifth procedure, third parity, with a history of early miscarriage. Consult a general practitioner for intense pelvic pain after 8 weeks of amenorrhea where a pelvic ultrasound was performed showing a right lateral uterine echogenic image with heavy peritoneal effusion then referred to our training for management. General examination finds a conscious patient, hypotensive at 90/50 mm Hg, tachycard at 120 beats per minute, discolored conjunctiva.

Abdominal examination finds pain and guarding of the right false iliac bone with signs of peritoneal irritation (Douglas cries).

Gynecological examination: no metrorrhagia, presence of right lateral uterine sensitivity.

Biological assessment reported by the patient: hemoglobin at 9 g/dl, Beta-hCG

: 1200, blood group B-

Pelvic ultrasound: presence of a 11 cm hematoma in the right lateral uterine, peritoneal effusion arriving at Morrison's space:



**Figure 1: 11 cm hematoma in the right side of the uterus**

Patient admitted to the operating room for suspected ruptured ectopic pregnancy.

On exploration: presence of a large peritoneal effusion with blood clots, aspirated, estimated at 1 liter, presence of a ruptured right cornual pregnancy with active bleeding. Exteriorization of the pregnancy followed by cornual resection and right salpingectomy. Patient transfused with a packed blood cell with injection of anti-D.



**Figure 2 : ruptured right cornual pregnancy**

**Case 2:**

This is a 25-year-old patient, second procedure, nulliparous. History of a voluntary termination of pregnancy. Admitted for management of pelvic pain with metrorrhagia over 4 weeks of amenorrhea. The clinical examination finds a conscious patient stable on the hemodynamic and respiratory level, afebrile and on examination gynecological: gravid cervix, minimal bleeding from the endocervix and on vaginal examination left latero-uterine sensitivity with a flexible abdomen. Given this clinical picture, the diagnosis of ectopic pregnancy is suspected.

Biological assessment: Beta -hCG: 1689 Hemoglobin: 13.4 g/dl

Pelvic ultrasound: Vacuum line in place, uterus of normal size, Left lateral uterine image measuring 1.7\*2.18cm, absence of peritoneal effusion :

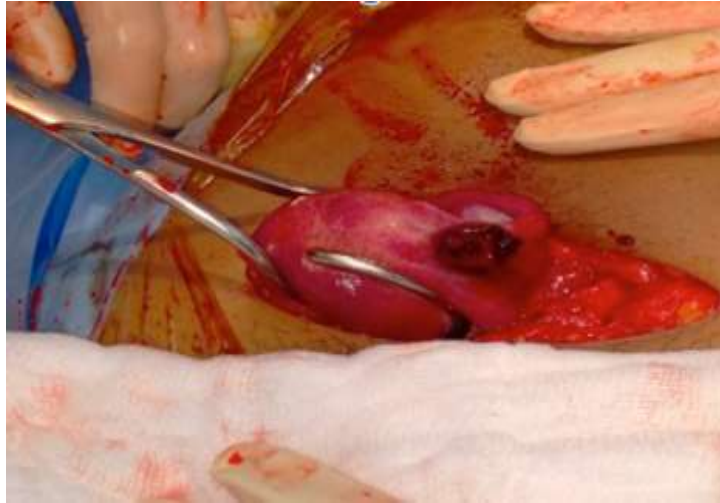


**Figure 3 : Left lateral uterine image measuring 1.7\*2.18cm**

Given the clinical biological and radiological evidence, the decision was to begin medical treatment based on methotrexate. The patient received an injection of methotrexate 60 mg, monitoring was marked by a worsening: clinically: exacerbation of pelvic pain with occurrence of hypotension at 90/60 mmhg  
Biologically: Hb: 11.8 / 13.4 g/dl

Ultrasound: appearance of a small effusion

The patient was sent to the operating room for suspicion of an ectopic pregnancy Ruptured, on exploration: presence of a moderately large aspirated effusion, with the presence of a ruptured left cornual pregnancy, hence the decision to perform a cornual resection with left salpingectomy.



**Figure 4: ruptured left cornual pregnancy**

### **Discussion**

Cornual pregnancy is a rare pathology in daily practice, its frequency represents 2% of ectopic pregnancies with a mortality rate of 2-2.5%, double that of tubal pregnancy (1,2). It is a rare entity which is distinguished from other types of ectopic pregnancy by its greater hemorrhagic risk with a broader indication for radical treatment.

It is generally implanted in the rudimentary horn of a bicornuate uterus or in the horn of a septate uterus or on the remaining stump of a tube after salpingectomy. But it can occur in a uterus without malformation and in a patient with no history of salpingectomy (1,2) as was the case in our patient.

The clinical signs are similar to other tubo-ovarian locations: acute pelvic pain, metrorrhagia, hemorrhagic shock.

In ultrasound: the diagnosis of cornual pregnancy is often made by suprapubic ultrasound. Indeed, the gestational sac may appear intrauterine fundal, thus delaying the diagnosis at the stage of rupture, which is life-threatening for the patient (5). In its typical form, on endovaginal ultrasound, the uterus appears empty, the gestational sac when it is visible creates a sessile fundic mass surrounded by the myometrium. However, the cornual seat is often discovered intraoperatively.

Radical treatment by salpingectomy with cornual resection is the classic treatment (6). Medical treatment with methotrexate in situ appears to be an interesting therapeutic alternative when possible (7). Selective embolization has recently been proposed as an effective treatment (8).

The prognosis of fertility and the risk of recurrence obviously depend on the state of the contralateral tube. As for the obstetric prognosis, it is marked by the risk of uterine rupture, thus, cesarean section seems to be justified during a subsequent pregnancy (6).

### **Conclusion**

Cornual ectopic pregnancies are situations with a risk of hemorrhagic rupture in the short term and recurrence in the medium term. treatment is surgical. During subsequent pregnancies, the clinician will be wary of the risks of recurrence and uterine rupture.

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