*wjpmr, 2019,5(11), 09-12*

**SJIF Impact Factor: 5.922**

WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

Case Report

ISSN 2455-3301

WJPMR

# INTERSTITIAL PREGNANCY DIAGNOSES AND MANAGEMENT: A CASE REPORT

**Mounia Chigri*, Halima Nachchat, Mounia Yousfi and Samir Bargach**

Departement of Gynecology Obstetrics, Cancers, and High Risk's pregnancies, Maternity Hospital Of Souissi, Faculty of Medicine and Pharmacy, Mohamed V University, Rabat - Morocco.

***Corresponding Author: Mounia Chigri**

Departement of Gynecology Obstetrics, Cancers, and High Risk's pregnancies, Maternity Hospital Of Souissi, Faculty of Medicine and Pharmacy, Mohamed V University, Rabat - Morocco.

**Article Received on 29/08/2019** **Article Revised on 19/09/2019** **Article Accepted on 09/10/2019**

## ABSTRACT

Through our clinical case of a young Moroccan woman, we report an ectopic interstitial pregnancy which is a rare entity and not very known by health practitioners. The diagnosis is difficult based on clinical and ultrasound criteria. Non-codified management is based on clinical presentation, always favouring conservative treatment.

**KEYWORDS:** Interstitial pregnancy, ultrasonography, conservative treatment.

## INTRODUCTION

Implantation of the egg outside the uterine cavity defines ectopic pregnancy (EP), this concept includes a spectrum of pathologies in form of multiple clinical entities.[1]

The antecedents of EP, spontaneous miscarriage, and abortion, smoking, pelvic infections, and the use of Assisted reproductive technology (ART) techniques are the main risk factors for the occurrence of these EP.[2]

In developed countries, at the beginning of the 2000s, the incidence of this type of pregnancy was as high as 175 EP per year per 100,000 women between 15 and 44 years old. The EP is rare with a variable frequency ranging from 1 to 3% of pregnancies according to series.[3] The most common ectopic pregnancies are tubal pregnancies representing 90%, non-tubal pregnancies are even more rare with a frequency of respectively 3.2% and 2.4% for ovarian pregnancies and interstitial ectopic pregnancies (IEP).[4]

The presence of the embryo in the intramyometrial portion of the fallopian tube defines the interstitial ectopic pregnancy (IEP).[5] These IEPs have a more serious maternal prognosis since the mortality rate is doubled compared to other classic tubal EPs.[6]

This prognosis is explained by the delayed diagnosis found in 20% of cases, so at the end of the first trimester there is a significant risk of a sudden rupture of the uterine horn with a haemoperitoneum, the clinical signs are catacyclic in a context of haemorrhagic shock.[5] Data from obstetrical ultrasound, and the dynamics of HCG allow earlier diagnosis.[7]

The management of this type of pregnancy is not consensual due to their low frequency, Currently methotrexate is considered the gold standard in the treatment of unruptured IEP, however multiple protocols can be used. Surgical treatment by laparotomy long considered reference is indicated only in case of rupture, the ceolioscopic approach is well described but is still not easy.[8,9]

## OBSERVATION

Mrs. EA, 31 years old, with no particular pathological antecedents, 2 gestities 1 parity, first gestity with cesarean delivery for a siege presentation. She consults for lateralized left pelvic pain, vaginal bledding on amenorrhoea of 08 weeks and one day.

On clinical examination, there was a hemodynamically stable, apyretic patient; with vaginal bleeding of low abundance with endo-uterine origin. On the vaginal touch, the uterus is found through two fingers of the pubic symphysis; no latero-uterine mass, no Douglas pain. The abdomen is flexible on examination.

An ultrasound was performed showing a gravid uterus containing a gestational sac inserted into the right uterine horn with a viable embryo of 08 weeks. There was also no pelvic anechogene or echogene fluid . It was concluded that this is an evolutionary right interstitial uterine pregnancy of 08 SA.

The BHCG rate was 56451.5 IU / L.

We performed a cornuotomy with evacuation of the pregnancy and then sutured the horn.

The follow-up was simple and BHCG monitoring revealed post-operative BHCG levels at 3561, 3 IU / L and 1464, 7 IU / L, respectively. Weekly monitoring of BHCG without MTX administration was decided and the evolution was marked by the decrease and then the negativation of BHCG in two weeks.

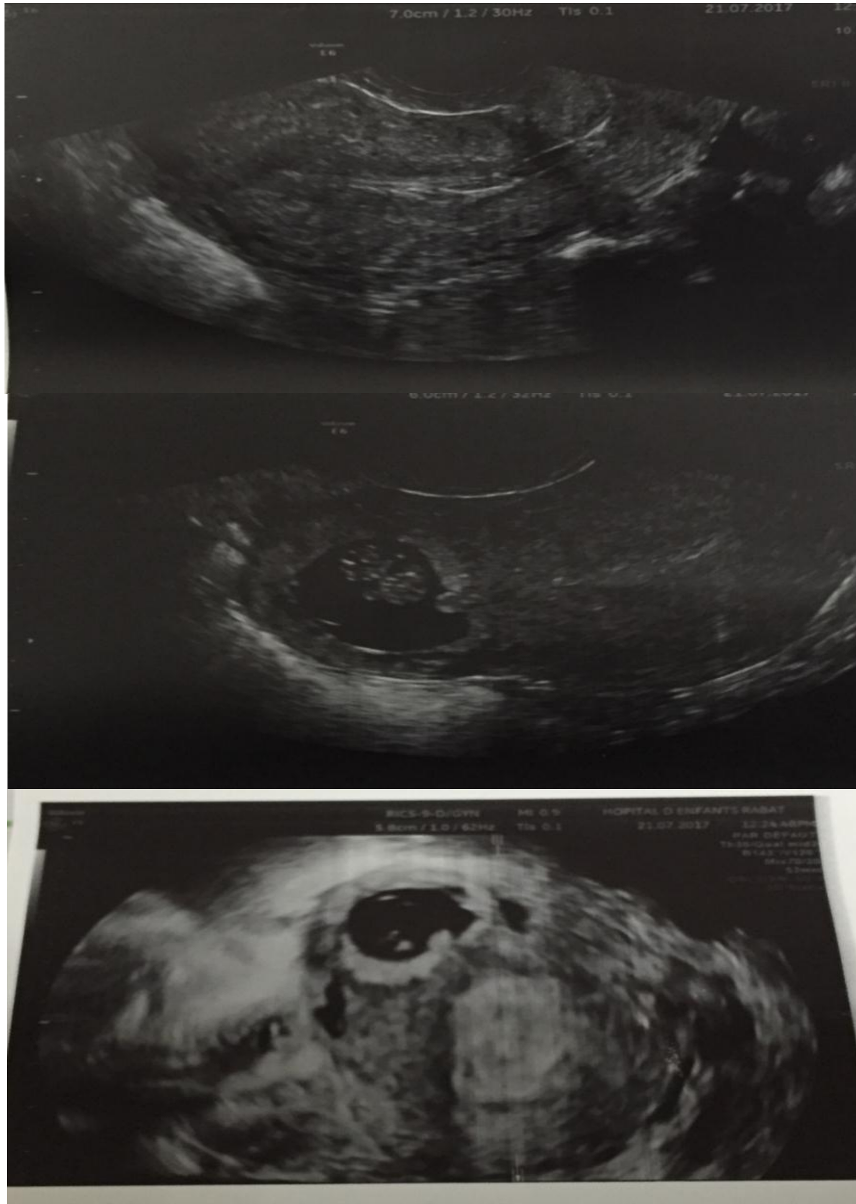

**Figure a, b, c: Ultrasound images showing interstitial pregnancy.**

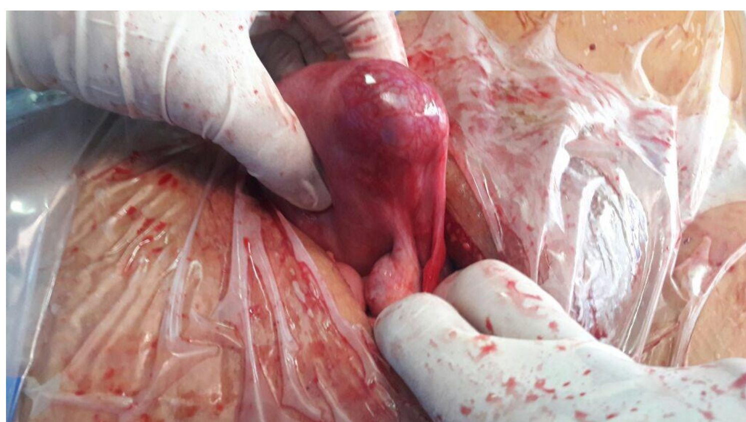

**Figure: Intraoperative image showing interstitial pregnancy before evacuation.**

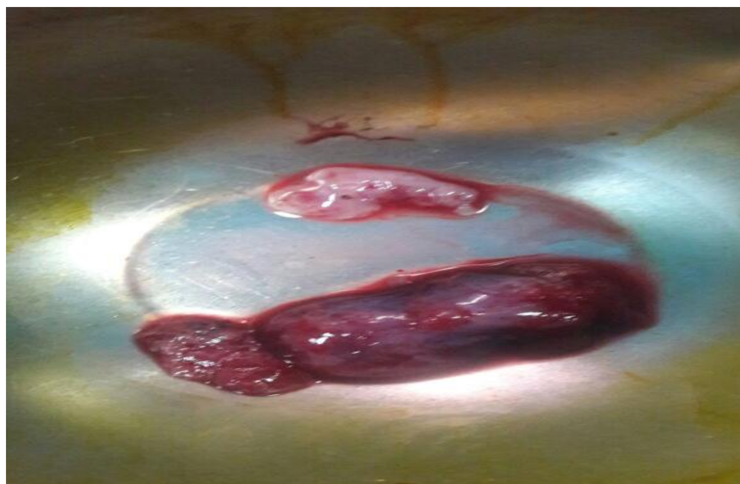

**Figure 3: Image showing embryo with trophoblast after evacuation.**

## DISCUSSION

IEPs remain rare of difficult diagnosis, the symptomatology is not specific.

The case of our patient is similar to the clinical data of the various series published, such as that of K. Nikodijevic et al, who reported an average age of 30 years and 8 months, with the main symptom being the pelvic pain present in 89% of cases, in 58% of cases, in all cases the diagnosis was retained during the first consultation in the emergencies.[10] On the other hand, Nadi et al found a lower frequency of these clinical signs, even they reported 02 diagnoses of asymptomatic women.[11]

Since the lack of specificity of clinical signs, ultrasound remains the gold standard for diagnosis, four signs that have been proposed as diagnostic criteria and which are:

1. The gestational sac is eccentric to the uterine sagittal axis. Cardiac activity was found in 18% of cases, an embryo without cardiac activity in 28% of cases, an empty bag in 36% of cases, or a solid tumor in 18% of cases. The sac is surrounded by a Doppler "vascular ring " signifying the trophoblastic vascular flow.
2. The absence of caducous around the IEP explains the absence of the double echogenic crown (double decidual sac sign in the Anglo-Saxon literature) found in the case of intrauterine pregnancies.
3. The IEP is entirely bordered by a myometrial sheet of less than 5 mm.
4. The most relevant echographic sign is that of the interstitial line, which is the interstitial part of the fallopian tube that joins the endometrium to the trophoblast. It appears as the most specific and sensitive ultrasound signs. Its observation, during the diagnosis of the location of a pregnancy, makes it possible to differentiate a IEP from a angular pregnancy and a inta uterine pregnancy. It is found in almost 92% of IEP. Conventionally, the distance between the edge of the uterine cavity (visible endometrium) and the trophoblast (external part of the egg on ultrasound) is at least 10 mm.[12]

Regarding the therapeutic management and until today there are no criteria to codify treatment, MTX can be used but with a low level of evidence.[9,13] The surgical treatment remains the reference treatment. The two main techniques are cornuotomy with suture or resection of the horn with salpingectomy. There is no significant difference in the literature between corneal resection and cornuotomy in terms of postoperative complications, blood loss or alteration of fertility.[14,15,16]

In the medium term, there is a risk of recurrence of interstitial pregnancy or uterine rupture in case of new pregnancy hence the interest of performing an early ultrasound in future pregnancy with close monitoring.The delivery modality is always discussed. Nevertheless, vaginal delivery remains possible.

## CONCLUSION

IEPs are rare with difficult diagnoses that must be managed quickly to preserve the maternal prognosis. The treatment should be discussed according to the experience of the medical team. The prevention of recurrence and uterine rupture in case of future pregnancy are the two main issues in the treatment of interstitial pregnancies.

## REFERENCES


1. Bouyer J. Epidémiologie de la grossesse extra-utérine : incidence, facteurs de risque et conséquences. J Gynecol Obstet Biol Reprod, 2003; 32: 8-17.
2. Kazandi M, Turan V. Ectopic pregnancy; risk factors and comparison of intervention success rates in tubal ectopic pregnancy. Clin Exp Obstet Gynecol. 2011; 38: 67-70.
3. Barnhart KT. Clinical practice. Ectopic pregnancy. N Engl J Med. 2009; 361: 379-87.

4. Bouyer J, Coste J, Fernandez H, Pouly JL, Job-Spira N. Sites of ectopic pregnancy: a 10-year population-based study of 1800 cases. Hum Reprod, 2002; 17: 3224-30.
5. Lau S, Tulandi T. Conservative medical and surgical management of interstitial ectopic pregnancy. Fertil Steril, 1999; 72: 207-15.
6. Benifla JL, Bardou D, Sebban E, Darai E, Madelenat P. Localisations inhabituelles de la grossesse extra-utérine. In: Fernandez H. Grossesse extra-utérine. Paris: Flammarion, 1997.
7. Lau S, Tulandi T. Conservative medical and surgical management of interstitial ectopic pregnancy. Fertil Steril, 1999; 72: 207-15.
8. Moawad NS, Mahajan ST, Moniz MH, Taylor SE, Hurd WW. Current diagnosis and treatment of interstitial pregnancy. Am J Obstet Gynecol, 2010; 202: 15-29.
9. Marret H, Fauconnier A, Dubernard G, Misme H, Lagarce L, Lesavre M, et al. États des lieux et expertise de l'usage hors AMM du méthotrexate en gynécologie–obstétrique : travail du CNGOF. J Gynecol Obstet Biol Reprod, 2015; 44: 230-6.
10. Nikodijevic K, Bricou A, Benbara A, Moreaux G, Nguyen C, Carbillon L et al. Grossesse extra-utérine cornuale : prise en charge, fertilité ultérieure et devenir obstétrical. Gynecol Obstet Fertil, 2016; 44: 11-6.
11. Nadi M, Richard C, Filipuzzi L, Bergogne L, Douvier S, Sagot P. Grossesse interstitielle, angulaire et cornuale : diagnostic, traitement et futur obstétrical. Gynecol Obstet Fertil Senol, 2017; 45: 340-7.
12. Bourdel N, Roman H, Gallot D, Lenglet Y, Dieu V, Juillard D, et al. Grossesse interstitielle. Diagnostic échographique et apport de l'IRM. À propos d'un cas. Gynecol Obstet Fertil, 2007; 35: 121-4.
13. Fernandez H, Lelaidier C, Thouvenez V, Frydman R. The use of a pretherapeutic, predictive score to determine inclusion criteria for the non-surgical treatment ofectopic pregnancy. Hum Reprod, 1991; 6: 995-8.
14. Nikodijevic K, Bricou A, Benbara A, Moreaux G, Nguyen C, Carbillon L et al. Grossesse extra-utérine cornuale : prise en charge, fertilité ultérieure et devenir obstétrical. Gynecol Obstet Fertil, 2016; 44: 11-6.
15. Douysset X, Verspyck E, Diguet A, Marpeau L, Chanavaz-Lacheray I, Rondeau S, et al. Grossesses interstitielles : traitement chirurgical, fertilité et devenir obstétrical. L'expérience rouennaise. Gynecol Obstet Fertil, 2014; 42: 216-21.
16. Lee MH, Im SY, Kim MK, Shin SY, Park WI. Comparison of laparoscopic cornual resection and cornuotomy for interstital pregnancy. J Minim Invasive Gynecol, 2017; 24: 397-401.