

## Heterotopic pregnancy: ultrasonographic diagnosis with non - route ectopic pregnancy in emergency service - Case report

*Gestação heterotópica: diagnóstico ultrassonográfico com gravidez ectópica não rota em serviço de emergência - Relato de caso*

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### ABSTRACT

The heterotopic pregnancy is a rare disease characterized by a topical pregnancy associated with an ectopic pregnancy, especially when it occurs spontaneously. Risk factors are similar to those seen in ectopic pregnancy, with the highest incidence in women undergoing assisted reproduction techniques. Diagnosis is made with a positive  $\beta$ -HCG and ultrasound examination, usually after hemorrhagic acute abdomen due to the rupture of the ectopic pregnancy, with treatment differing in relation to the frame and the gestational age of the patient.

**Keywords:** heterotopic pregnancy, ectopic pregnancy, ultrasound.

### RESUMO

A gravidez heterotópica é uma entidade rara, caracterizada por uma gravidez tópica associada a uma gravidez ectópica, sobretudo quando ocorre de forma espontânea. Os fatores de risco são semelhantes aos vistos em ectópicas, sendo a maior incidência nas mulheres que se submetem a técnicas de reprodução assistida. O diagnóstico é feito com  $\beta$ -HCG positivo e exame ultrassonográfico, geralmente após quadro de abdome agudo hemorrágico decorrente do rompimento da prenhez ectópica, com o tratamento divergindo em relação ao quadro e da idade gestacional da paciente.

**Palavras-chave:** gravidez heterotópica, gravidez ectópica, ultrassonografia.

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## INTRODUCTION

Heterotopic pregnancy is a rare entity characterized by a topical pregnancy, intrauterine, associated with an ectopic pregnancy, especially when it occurs spontaneously. The reported incidence varies from 0.6 to 2.5 cases per 10,000 pregnancies, being slightly higher in women undergoing assisted reproductive techniques. It is usually diagnosed after hemorrhagic acute abdomen due to the rupture of the ectopic pregnancy, performed by ultrasound study. It is reported the case of heterotopic pregnancy diagnosed in the emergency department, with non route ectopic pregnancy and topical pregnancy with favorable development to term delivery.

## CASE REPORT

Patient, P. C.O, with menstrual delay frame of five weeks without earlier obstetrical ultrasound, was admitted to the service with diffuse abdominal pain and vaginal bleeding. Beta - HCG showed a positive result.

In transvaginal ultrasound was evidenced heterogeneous expansive formation in left tubal topography, without flow to the colored doppler concomitant with topical pregnancy with live embryo, without free fluid signals. A magnetic resonance cavity revealed a heterogeneous nodule located in adnexal left region, with some internal cystic foci with gravid uterus containing live embryo.

Patient remained stable, performing sequential ultrasound for monitoring, with stability characteristics and size of the mass, with normal development of the fetus in utero, with consequent term delivery, via cesarean section.

## DISCUSSION

Heterotopic pregnancy is a rare condition in which there is simultaneous ectopic pregnancy and intrauterine pregnancy. The most frequent location is the oviduct, but it can be also cornual, cervical, ovarian, abdominal and scar cesárea.<sup>1</sup>

The incidence ranges from 1: 30,000, but after assisted reproduction frequency of this complication was to 1: 100-500 pregnancies.<sup>2</sup> Risk factors associated with heterotopic pregnancy are the same related to ectopic pregnancy, represented mainly by mechanical disorders functional and / or that prevent or delay the passage of the embryo to the uterine cavity.<sup>3</sup> Among them, pelvic inflammatory disease, uterine malformation, advanced age, smoking, pelvic surgery, infertility history and application of reproductive techniques are risk factors too.<sup>3</sup>

The clinical manifestations are varied, being the first complaints that related to hemorrhagic acute abdomen (abdominal pain and signs of hypovolemic shock). Heterotopic pregnancy can be suspected when there is abdominal pain on palpation with signs of peritoneal irritation, adnexal mass and dimensions of the uterus is increased.<sup>4</sup>

In 70% of cases the diagnosis is in 5-8<sup>o</sup> week of pregnancy and early diagnoses is difficult, occurring mostly after tubal rupture. The biochemical markers, beta-HCG not guide the workup, which are seen in normal, secondary to normal hormonal activity trofoblastic tissue.<sup>5</sup>

As for treatment, there is no consensus the best course to follow, relating to the place where the ectopic gestational sac and the time of diagnosis. The surgical approach through laparotomy or laparoscopy is the choice when the ectopic is at tubes,<sup>6</sup> as in the case of the patient in question.

## CONCLUSION

The heterotrophic pregnancy is rare, and it is a diagnosis that should be well researched, since the presence of a topical pregnancy doesn't exclude concomitant ectopic pregnancy, even more in cases with clinical complaints of acute abdomen. For this, the sonographic examination is still the method of choice for initial evaluation and diagnosis of these patients.

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