An unusual tubal pregnancy implantation

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Abstract
We report one case of an unusual tubal ectopic pregnancy, in which daily maternal signs were only orientative and not clinically helpful. Nevertheless, minimal tubal pregnancy signs observed with high resolution ultrasound scans revealed useful for making a final diagnosis.

Introduction
Ectopic pregnancy (EP) is the implantation of a fertilized egg outside the uterine endometrial cavity. An ectopic pregnancy should be considered whenever a woman presents to the emergency with abdominal pain and/or vaginal bleeding.

But many times, certain symptoms are not so evident, and every sign should be carefully considered. Ultrasound is a valuable diagnostic test throughout the first trimester pregnancy. Ultrasound can help in discarding differential diagnoses that can mimic ectopic pregnancy (appendicitis, ovarian follicular cyst, etc) [1]. Interestingly in a recent report [2] the endometrial pattern and endometrial thickness less than 9.8 mm where predictive of EP in early pregnancies, which led to conclude how the above mentioned patterns may be helpful in identifying women with a pregnancy of unknown location for close supervision.

No single level of Beta HCG may be diagnostic of EP [3], usually cases are diagnosed or suspected bellow the discriminatory zone of 1500 mIU/ml when an intrauterine gestational sac is not concomitantly visualized [4]. When an intrauterine gestational sac is not visualized in a first trimester ultrasound scan, we usually with a Beta HCG zone > 1500 mIU/ml, and values higher by 66% after 48 hours sampling, may reassure the pregnant woman, considering always to program a transvaginal ultrasound examination within 7-14 days.

Case report
A 21 year old G0 P0 woman presented to our Institution for evaluation. About ten days before she was visited by her physician who performed a transvaginal ultrasound scan with no endocavitary signs of evolutive pregnancy and with a Beta HCG value at 941 mIU/ml at 6 wks gestation. Two days before she described minimal brown vaginal losses, which presented minimally twice afterwards. In the two following days, she went to emergency presenting nervous episodes more than actual symptoms, and signaling a slight pain in the left abdominal lower quadrant, with no vaginal bleeding. At emergency, no gestational sac was observed by ultrasound scan and Beta HCG values were 1233 and 1270 respectively at 6 wks +1 and the day after.

Afterwards, other Beta HCG values were 509 mIU/ml at 6 wks +2 and 256 mIU/ml at 7 wks + 2. With these premises, she was diagnosed a first trimester abortion.

Her aunt, a nurse working in our Department, brought her to us for a definitive diagnosis. Clinically she presented with the slight left sided pain, no vaginal bleeding at 7 wks + 4. No intrauterine gestational sac was observed (as in all ultrasound scans performed before); Beta HCG were 137 mIU/ml that day. Ultrasound scan showed a dilation of the zone corresponding to distal tube, which was related to EP with a minimal hyperechogenic area of 2.1 mm (Figure 1). Left ovary was well visualized (Figure 2, sliding organs sign). The endocavity pattern was strongly hyperechogenic, < 10 mm (Figure 3). No pain was reactive to transvaginal probe movement and no fluid was seen out from uterus. The left tubal EP was prospected.

A week after, in the last ultrasound scan performed, Beta HCG were 127 mIU/ml and the dilation of the zone corresponding to distal tube was almost the half in dimension, with no other signs observed.

Two months after the patient presented spontaneous menstrual menses and a week after a hysterosalpingography was performed, confirming the signs of left tubal dilation after tubal EP.

Conclusion
Bleeding and pain are experienced by 20% of women during the first trimester of pregnancy. Although most pregnancies tend to progress normally, these symptoms are distressing for women, and they are also associated with an increased risk of miscarriage and ectopic pregnancy [5].

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Ectopic pregnancy presents a major health problem for women of child bearing age. It refers to the pregnancy occurring outside the uterine cavity that constitutes 1.2-1.4 % of reported pregnancies [6].

In the present case report, the final diagnosis of tubal EP was performed after a good high resolution ultrasound scan interpretation. Betta HCG were always under the 1500 mIU/ml, vaginal bleeding was not significant, a slight left pelvic pain maybe was the only clinical sign which led to final ultrasound diagnosis. The patient arrived with the diagnosis of third trimester abortion. Two consecutive ultrasound scans and the subsequent hysterosalpingography gave the last mark to a not evolutive, unusual in progression, left tubal ectopic pregnancy.

The final conclusion is that an interpretation of all data available should be done in conjunction with clinical and ultrasound examination in order to arrive to a correct diagnosis.

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