Heterotopic Pregnancy In A Low Risk Woman: A Diagnostic Dilemma

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Abstract

Whilst ectopic pregnancy is a relatively common occurrence, (11.1/1000 pregnancies 1), heterotopic pregnancy has traditionally been regarded as an extremely rare event. Recently, with the advent of assisted reproductive techniques the incidence has risen, but in a spontaneous conception cycle however, its incidence is still rare, and estimated to be 1:30,000 2. This case report illustrates that even when a diagnosis of intrauterine miscarriage has been made, coexistence of an ectopic pregnancy cannot be completely excluded. The patient was suspected to have incomplete miscarriage with suspicion of molar pregnancy on scan, however serum B-HCG was not grossly elevated. Suction curettage was done and products of conception were confirmed on histological examination. Couple of week's later patient presented with acute abdomen and was suspected to have ectopic pregnancy. The diagnosis of Interestial Pregnancy was confirmed on laproscopy and partial salpingectomy was done.

A 36-year-old primigravida, presented with vaginal bleeding, lower abdominal pain and a positive pregnancy test. There was no history of abdomino-pelvic surgery, sexually transmitted diseases, pelvic inflammatory disease (PID) or intrauterine contraceptive device (IUCD) use or assisted conception techniques.

The serum ?-hCG was13650 IU/L and a transvaginal scan identified a 2.5cm intrauterine gestational sac with no fetal pole. Some sonographic features raised suspicions of "a molar pregnancy" but at evacuation of retained products, only "normal-looking" tissue was found. Histology confirmed normal "products of conception" with no Arisstella reaction or molar tissue and hence no follow-up was arranged.

Three weeks later she presented with sudden lower abdominal pain, weakness, and heavy vaginal bleeding. Her cervix was closed with moderate cervical excitation and severe pain in the left adenexa. The urinary pregnancy test was still positive and transvaginal scanning showed a "7.1 x 5.5 x 5.2 cm mass to the left of uterus".

A diagnostic laparoscopy revealed ruptured ectopic pregnancy in the interstitial portion of the left fallopian tube and a partial salpingectomy was carried out. Histology confirmed ectopic pregnancy and she made an uneventful recovery.

DISCUSSION

Heterotopic pregnancy, the coexistence of intrauterine and ectopic gestations, was first reported in 1708 ₃. Its aetiology is multifactorial with anatomical and functional alteration of the fallopian tubes. Factors like PID and gonadotrophins administration are the main predisposing factors₄, but IUCD use, endometriosis, or previous abdominal-pelvic surgery has also been recognized causes. Most cases are thought to arise from multiple ovulation, and thus with the advent of ovulation induction it is not surprising the incidence has increased. Its frequency in spontaneous conception cycles is 1 in 30,000₄ and in assisted fertilization cycles is 1:2600₅.

Its diagnosis is often difficult and serial serum samples of \mathbb{I} -hCG can be misleading₁. Abdominal pain, adnexal mass, peritoneal irritation and enlarged uterus are common signs. Transvaginal sonography however has increased the diagnosis up to $91\%_6$.

This case illustrates the need of follow-up in a patient who has ''normal'' histology on evacuation despite ultrasound features prior to the operation suggestive of a molar pregnancy. A repeat serum BHCG +/- follow-up scan at an earlier stage may have revealed the presence of the ectopic pregnancy sooner, avoiding the serious potential consequences, which she experienced.

The heterotopic pregnancy was most likely to be there at the

time of the initial presentation, especially in view of the original scan findings, as the pregnancy in the tube as well as in the uterus, may have given the appearance of a molar pregnancy. An alternative explanation however, may have been the possibility of retrograde spill of products of conception during the initial suction curettage, resulting in persistent trophoblastic disease especially as the ectopic was found in the interstitial/cornual portion of the tube.

References

1. Kelly AJ, Sowter MC, Trinder J. The Management of Tubal Pregnancy. Clinical Guidelines. NHS Executive, May 2004.

2. Ludwig M; Kaisi M; Bauer O; Diedrich K. Heterotopic

pregnancy in a spontaneous conception cycle: do not forget about it! Case Report. Eur J Obstet Gynecol Reprod Biol 1999. 87: 91-93

3. Varras M, Akrivis C, Hadjopolous G, Antoniou N. Heterotopic pregnancy in a natural conception cycle presenting with tubal rupture: a case report and review of the literature. Eur J Obstet Gynecol Reprod Biol 2003; 106:79-83

4. Botta G, Fortunato N, Merlino G. Heterotopic pregnancy following administration of human menopausal gonadotrophin following in vitro fertilization and embryo transfer: two case reports and review of the literature. Eur J Obstet Gynecol Reprod Biol 1995; 211-215.

 Bright DA, Gaupp FB. Heterotopic pregnancy: a reevaluation. J Am Board Fam Pract 1990; 3:125-128.
Condous G, Okaro E, Khalid A, et al. The accuracy of transvaginal ultrasonography for the diagnosis of ectopic pregnancy prior to surgery. Hum Reprod 2005; 5:1404-9

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