

Hyperreactio luteinalis in spontaneous singleton pregnancy

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Submitted: 2010-03-23 Accepted: 2010-05-03 Published online: 2010-06-30

Key words: hyperreactio luteinalis; spontaneous singleton pregnancy

Neuroendocrinol Lett 2010; 31(3):304–305 PMID: 20588241 NEL310310C04 © 2010 Neuroendocrinology Letters • www.nel.edu

Abstract

A case of a pregnant woman with bilateral cystic ovaries diagnosed in the 12th week of gestation is presented. The successful outcome of pregnancy with hyperreactio luteinalis, which spontaneously resolved in the 3rd trimester and the importance of a differential diagnosis of an abdominal mass during pregnancy to avoid unnecessary surgery is demonstrated.

INTRODUCTION

Hyperreactio luteinalis (HL) is usually defined as a bilateral and, in rare cases, a unilateral ovarian enlargement during spontaneous pregnancy especially in the first trimester due to the presence of numerous theca-lutein cysts (Dorland's Medical Dictionary 2007; White & Bradbury 1965). This benign condition is usually associated with abnormally high levels of human chorionic gonadotropin (β -HCG). The literature describes about 70 cases of HL (Check *et al.* 2000; Csapó *et al.* 1999; Foulk *et al.* 1997; Schnorr *et al.* 1996; Suzuki 2004).

CASE REPORT

A healthy primigravida primipara aged 30 years with no risk factors was referred to our department in the 12th week of pregnancy. The sonographic examination carried out in the 6th week of gestation for amenorrhoea demonstrated normal vital pregnancy and ovaries. Now bilaterally enlarged ovaries were found filling the abdominal cavity with a pattern of multiple theca lutein cysts up to 40 mm. The total size of the ovaries was

about 195×108×91 mm. There was no ascites and the intrauterine vital pregnancy corresponded to the 12th week of gestation; in the placenta, there was an obvious hypoechogenic cystic formation 30 mm in diameter. The patient displayed no clinical complaints.

Magnetic resonance image demonstrated the presence of a multi-chamber expansion in the pelvis (Figure 1). Chest X-ray demonstrated no focal changes in the lung parenchyma (Telischak *et al.* 2008).

β -HCG in the blood serum was 129 000 u/l, CA 125 corresponding to 78 iu/ml. The blood serum biochemistry ranged within normal values; the blood count was normal.

Due to the fact that the patient's clinical condition did not call for any surgical intervention and the sonographic finding indicated no suspect malignancy, we decided to adopt a conservative approach (Langer & Coleman 2007).

The patient was monitored at 2-week intervals; the sonographic finding was gradually reduced, and after 12 weeks, the ovaries were almost normal

in size and appearance, about 45×35×35 mm. The cystic formation in the placenta, which was formerly described in the 12th week of pregnancy, also vanished. β-HCG level in the blood serum decreased.

The pregnancy was furthermore monitored in a standard way with putting emphasize on the growth of the foetus. The next course of the pregnancy was physiologic. In the 41st week of pregnancy, an acute Caesarean section was carried out due to intrapartal fetal distress. The perioperative finding was normal and the ovaries were normal in their appearance and size. A healthy foetus of female gender, 2770 g, was delivered. Histological examination of the placenta demonstrated no pathological condition. No complications were encountered in the course of the puerperium.

CONCLUSION

We presented a course of pregnancy with HL development in the first trimester and spontaneous regression in the third trimester with a successful outcome for a mother of a first newborn.

The finding of enlarged ovaries in pregnancy usually presents a problem of differential diagnostics. A conservative approach with regular controls is recommended in the absence of suspect malignancy. It is necessary to consider a timely diagnosis of combined pregnancy complications. After the delivery, a spontaneous regression of enlarged ovaries is typically achieved. In an HL diagnosis and uncomplicated course of pregnancy, laparotomy and ovariectomy are not primarily indicated.

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Fig. 1. Presence of a multi-chamber expansion in the pelvis (MR).

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