

P228. Hyperreactio luteinalis in twin pregnancy, a case report.

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Hyperreactio luteinalis (HL) is a rare condition characterized by bilaterally enlarged ovaries, containing multiple self-limiting theca lutein cysts. The correct diagnosis can help to avoid unnecessary surgical intervention and termination of pregnancy. HL is associated with elevated human chorionic gonadotropin, mostly in twin pregnancies or trophoblastic disease. However there are also case reports on singleton pregnancies. HCG is produced in the human placenta by the syncytiotrophoblast. HCG interacts with the LHCG receptor of the ovary and maintains corpus luteum from apoptosis during the beginning of pregnancy.

This report presents a case of HL in a 28 years old primigravida primipa woman with spontaneous monochorial diamniotic male fetus twin pregnancy. During the first trimester ultrasound was normal. At the 16th gestational week ultrasonographically bilaterally multicystic ovaries are noted: the right one 118 x 86 mm and the left one 141 x 87 mm that continued to be enlarged until the birth. The woman started to complain on acne and voice deepening. The HCG was two times elevated, CA 125 was slightly elevated (the highest 81.9 IU/mL), but HE4, CEA, HER-2, ROMA index was normal. There was consultation in the Perinatal Care Center of the Pauls Stradins Clinical University Hospital and she was scheduled for elective Caesarean section with ovary biopsy. Due to spontaneously ruptured fetal membranes, acute Caesarean section was performed at night with no ovarian biopsy (Partus 10.05.2016, 3270g and 2920g). Two and half months after the operation, the CA 125 normalized (16.1 IU/mL) and testosterone was only slightly elevated (0.52 ng/mL). Androstenedione, free testosterone, DHEA-SO₄, SHBG and cortisol was normal. However the voice was still deeper than before the pregnancy. Ultrasound of ovaries: the right 63.5x 40 x 47.1 mm and the left 51.6x 35.5 x 41.8 mm, homogeneous, with few small follicles. Eight months later the ovarian MRI was performed: the right ovary 47 x 22 mm, the left 44 x 25 mm with signs of fibromatosis. The MRI of hypophysis was normal.

Hyperreactio luteinalis is not very common and well-explained condition. It is not fully understandable why in one pregnancy theca cells react hyperactively but in other not. It is believed that genetics plays the main role in the pathogenesis of formation hypersensitivity to HCG.

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