Large luteinized thecoma of the ovary in singleton pregnancies – case report

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Abstract
Luteinized thecoma account for 20% of all ovarian tumors in pregnant women. They are usually of small sizes and disappear in the second trimester of pregnancy. However, sometimes they can survive to childbirth, taking a form of large, multicystic tumors, filling the whole abdominal cavity and thus being an obstacle to labor. A primiparous woman, aged 23, was admitted to the Obstetric and Gynecology Ward in Kutno in 38th week of pregnancy due to beginning of contractile activity of the uterus. In internal examination minor pelvis tumor indented through back fornix was found. Ultrasonography examination showed presence of cystic and solid tumor with longitudinal axis approx. 28 cm in the Douglas sinus. Because of inability of having the delivery through natural passages due to the tumor in the Douglas sinus which was an obstacle to labor, the parturient was classified for caesarean section. A female fetus of 3360 g birth weight, with Apgar score 9, was delivered. Behind corpus of the uterus were significantly enlarged ovaries with numerous several-centimeter thin-walled tumors. Dimensions of the ovaries: the left one 25 × 10 cm, the right one 28 × 12 cm. Material for histopathological examination was taken. Postoperative course through back fornix was found. Ultrasonography examination showed presence of cystic and solid tumor with longitudinal axis approx. 28 cm visible in abdominal cavity.

Key words: luteinized thecoma, single pregnancy, ovarian tumor, obstacle to labor

Introduction
Luteinized thecoma account for 20% of all ovarian tumors in pregnant women. They arise as a result of prolonged and excessive ovary stimulation by exogenous or endogenous gonadotrophin, or because of excessive ovary sensitiveness to gonadotrophic hormones action [1, 4-6]. With regard to histopathology they are included into functional change [4]. Most often they coexist with hydatidiform mole. Sometimes they can accompany twin pregnancy, and hardly ever normally developing single pregnancy [2]. This kind of thecoma usually is not big and disappears in the second trimester of pregnancy [4]. However, sometimes they can last till labor, taking the form of very big multilocular cysts which fill the whole abdominal cavity.

The paper presents a case of single pregnancy complicated by the presence of large bilateral luteinized thecoma, being an obstacle to labor.

Case presentation
A primiparous woman, aged 23, was admitted to the Obstetric and Gynaecology Ward of SPZOZ Hospital in Kutno in 38th week of pregnancy due to beginning of contractile activity of the uterus. Medical history of a patient towards gynaecological and general diseases negative. During her previous stay at hospital the presence of polycystic tumor filling the Douglas sinus was diagnosed. While the pregnancy was developing, it was increasing.

The pregnant did not report any pain ailment. On admission, the following was found out: uterus with excessive contractile activity, with its fundus reaching costal arch, painless. Vaginal part approximately 1 cm, soft, displaced to pubic symphysis, the canal patent for the width of one finger. Amniotic sac preserved. Presenting part of the fetus – a head, placed high above the pelvic plane of inlet. Lumen of a half vaginal upper part significantly narrowed due to immobile minor pelvis tumor of heterogeneous consistency indenting through back fornix.


CTG: irregular contractile activity of the uterus, pendular oscillation, numerous accelerations. Because of the beginning of contractile activity of the uterus and inability of having delivery through natural passages due to obstacle to labor created by tumor in the Douglas sinus, the parturient was classified for the caesarean section.

Abdominal cavity was open by low median incision. Muscle of uterus was transversely incised in lower part and female fetus of 3360 g birth weight, Apgar scale 9 was delivered. The secundines grossly unchanged. Behind corpus of the uterus the presence of significantly enlarged ovaries with numerous several-centimeter thin-walled tumors were found.

The uterus and changed ovaries were exteriorized. Dimension of ovaries: the left one 25 × 10 cm, the right one 28 × 12 cm. Material for histopathological examination was taken. Abdominal cavity was closed in layers. Postoperative course with no complications. The patient left hospital in the

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seventh day after the procedure. Histopathological examination result: Degeneratio policystica ovarii. Cystes serosae et cystes thecaluteinaea multiplices et multiloculares ovarii.

Discussion

Formation of luteinized thecoma in case of normally developing single pregnancy is probably caused by the growth of ovarian stroma cells sensitivity to normal concentration of chorionic gonadotrophin (HCG) [3]. As the result of thecoma development it comes to bilateral ovaries enlargement, sometimes that much that they are obstacle to labor. It happens that stroma edema may result in hyperplasia and granule and thecal cells luteinization. In such situations they can be the source of androgens leading to hyperandrogenizing symptoms occurrence in mother and virilization in female fetuses. Such situations do not happen very often, considerably more seldom than in the case of luteoma type tumors.

In pregnancy, a conservative therapy of luteinized thecoma is a treatment of choice. Surgical treatment should be put into practice only if complications appear (torsion of tumors or their rupture with bleeding to abdominal cavity) [3]. The appearance of ovarian luteinized thecoma in consecutive pregnancy is seldom [3].

References


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