Impacted uterine myoma in a 14 week pregnant patient

Agnieszka Dobrowolska-Redo¹, Justyna Teliga-Czajkowska²#, Ewa Romejko-Wolniewicz¹, Julia Zaręba-Szczudlik¹, Krzysztof Czajkowski¹

1. The 2nd Department of Obstetrics and Gynecology of Warsaw Medical University, Poland
2. Department for Didactics of Gynaecology and Obstetrics, Faculty of Health Sciences, Medical University of Warsaw, Karowa St 2, p.o. box 00-315 Warsaw, Poland. Tel. +48 22 5966 421, Fax +48 22 5966 487

#Corresponding author: Justyna Teliga-Czajkowska e-mail: jtckcac@gmail.com Karowa St 2, p.o. box 00-315 Warsaw, Poland Tel. +48 22 5966 421, Fax +48 22 5966 487

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ABSTRACT
Uterine myomas are some of the most frequent neoplasms in women in the reproductive age. The frequency of uterine myomas in pregnancy varies between 0.1 and 3.9 %. The pregnancy in a woman with uterine myomas is usually uncomplicated, but in 10% of them, the myomas may cause symptoms. The study presents the case of a pedunculated submucosal myoma impacted in the rectouterine pouch in a woman 14 weeks pregnant.

INTRODUCTION
Uterine myomas are some of the most frequent neoplasms in women in the reproductive age (1,2). The frequency of uterine myomas in pregnancy varies between 0.1 and 3.9 % (2,3,4,5). Most of them appear without any symptoms. The pregnancy in a woman with uterine myomas is usually uncomplicated, but in 10% of them the myomas may cause pain in the small pelvis, miscarriage, bleedings, premature delivery, premature leaking of amniotic fluid (3,4,6,7). During the delivery, the presence of myomas may be conducive towards incorrect position of the fetus, shoulder dystocia, increased risk of delivery with a procedure, and caesarean section. After delivery, myomas may cause bleeding and placental tissue retention (3,4,6,7). Myomectomy during the planned caesarean section seems to be the safe method (8,9), while myomectomy during pregnancy is associated with higher risk of bleeding, increased
mortality of mothers, and risk of losing the pregnancy (9). Only 2% of women require an urgent surgical intervention during pregnancy (7). It is believed that surgical intervention should be considered in the case when the pain symptoms persist for 72 hours despite analgesic treatment (5,7). Pedunculated myomas may be particularly dangerous in case they become wedged-in, while their removal bears a lower risk of perioperative bleedings. The study presents the case of a pedunculated submucosal myoma impacted in the rectouterine pouch in a 14 weeks pregnant woman.

CASE DESCRIPTION

The patient was a 33 year old primigravida, admitted to the hospital while 14 weeks pregnant, as an emergency case, due to the complaints of hypogastric pains intensifying for 3 days, not disappearing after administration of analgesic medications. Until the complaints, the course of pregnancy had been without complications. The ultrasound examination in 6th week of pregnancy presented a living fetus consistent with the pregnancy age. On the posterior wall a pedunculated myoma 99x51 mm was discovered. In a follow-up ultrasound examination in the 12th week of pregnancy, the myoma was found to grow, to the dimensions of 114x74mm. After admitting the patient to the Clinic, her general condition was good, however there appeared strong pains of the hypogastrium radiating to the anus. The blood arterial pressure maintained at the level of 125/85 mmHg, pulse 90/minute, temperature within normal limit. In the gynaecological examination, there was discovered that the vaginal part was behind the pubic symphysis of the length of 2 cm, uterus of correct tone, and at the same time significant muscular pain occurred when moving the uterus. The rectouterine pouch was bulging, tender, filled with a hard tumor of the diameter of about 10 cm – probably an impacted myoma. The patient was informed of indications to an urgent surgical intervention. The abdominal cavity was opened in midline from the pubic symphysis to the navel. During the operation, there was revealed the pulpy body of the uterus, expanded, consistent with the week of pregnancy. Behind the uterus, in the rectouterine pouch, there was discovered an impacted pedunculated submucosal myoma, dimensions 15x8 cm, extruding from the posterior wall from the area of the left horn of the uterus, pulling the uterus posteriorly. The diameter of the peduncle was 2 cm. Apart from that, there were also present two intramural myomas in the anterior wall, each of the diameter of about 2 cm. Due to the difficulty in extracting the impacted myoma, a decision was made during the operation to additionally cut the upper border of the wound, at the angle of 70 degrees, omitting the navel. Through bipolar coagulation, the myoma was removed and the peduncle was fixed with single sutures. The post-operative course was without complications. The patient was discharged on the 8th day, in a good general condition, with live pregnancy. The delivery was without complications, natural, at term.

DISCUSSION

Myomas, in the course of pregnancy, are diagnosed in between 0.1% to even 12.6 women (10,11). Myomas of the size of over 3 cm are discovered in ultrasound examinations in about 4.17% pregnancies (4). As per the research by Muram et al. (12), 42% of myomas are discovered during physical examinations of pregnant women, but in the group of myomas of the size of 3-5 cm, that rate is only 12.5%. It is getting more difficult to locate myomas together with the progress of pregnancy. In many cases, the presence of myoma or myomas, is discovered accidentally during caesarean section (13). According to Muram et al. (12), only in about 41% cases, the presence of myomas is known to the physician supervising the pregnancy. Pregnancy is the period when the uterus becomes significantly enlarged, and the concentrations of hormones – both estrogens and progesterone – are high (14). The impact of pregnancy on changing the size of myomas, is difficult to determine. About 22% to 32% myomas are enlarged during pregnancy, while 7.8% to 19% decrease in volume (15,16). As per the research by Hammoud et al. (2), in the systematic ultrasound examinations between the first half of a pregnancy and its 20th/30th week, a little over one half of myomas shrink, on average in about 35% cases. The remaining myomas (45%) significantly expand in that period, on average by 69%. The changes in volume may depend on the initial size of myomas. A fast growing myoma during pregnancy may cause strong pains, compression on the alimentary canal, and, in additional examinations, look like an oncologically suspicious lesion (17,18). In the case of a polycystic lesion, with uneven echogenicity, it is only possible to distinguish between a necrotic myoma and a sarcoma, on the basis of a microscopic examination. The presence of myomas causes a more frequent occurrence of caesarean sections, by about 25-100% in comparison with other patients (4,6,19,20,21). Coronado et al. (22) analyzed the course of pregnancies of 2065 women with myomas and 4243 without myomas, and discovered that the patients with myomas much more often developed bleedings in early pregnancy (OR=1.82; 95% CI 1.05-3.20), premature placental abruption (OR=3.87 1.63-9.17), hydramnion (OR=2.44; 95% CI 1.02-5.84). The authors also recorded disturbances during delivery in the form of incorrect course of delivery (OR=1.85, 95% CI 1.26-2.72), frequency of breech position (OR=3.98; 95% CI 3.07-5.16), percentage of caesarean sections (OR=6.39; 95% CI 5.46-7.50), more frequent deliveries before the 38th week of pregnancy (OR=1.47; 95% CI 1.16-1.87), more children with the mass of < 2500g (OR=1.99; 95% CI 1.51-2.62) and assessed at < 7 points in the Apgar scale in the 5th minute of life (OR=2.49; 95% CI 1.49-4.15). Very similar results in a group of 690 pregnant women with myomas, were presented by Sheiner et al. (23). The operations of removing myomas during pregnan-
BIBLIOGRAPHY


