IJBCS
ISSN: 2147-1428

Case Report

International Journal of Basic and Clinical Studies (IJBCS)
2014;3(1): 59-63 Ingec M and Yilmaz M

Multiple Myomectomy During First Trimester of Pregnancy: A Case Report

Metin Ingec[1] **Mehmet Yilmaz**[1]

[1] Department of Obstetrics and Gynecology, Faculty of Medicine, Ataturk University, Erzurum, Turkey.

Corresponding author: Mehmet Yilmaz, Department of Obstetrics and Gynecology, Faculty of Medicine, Ataturk University, Erzurum, Turkey +90 442 3446666 -7648, 505 2515350; Fax: +90 442 3166340, drmyilmaz25@gmail.com

Abstract

The literature data first trimester myomectomy of uterine leiomyoma during pregnancy is scant.
The patient was admitted to our department with the complaints of abdominal pain and constipation. In the ultrasonographic evaluation multiple fibroids and eleven week single fetus were detected. A total of twelve fibroids were removed.
A few myomectomies have been reported during the first trimester. Our case is the most numerous fibroids during pregnancy, is removed in first trimester so far.
We believe that our experience with the patient that was applied multiple myomectomy at the first trimester, could be encourage our colleagues.

Key words: Myomectomy, Pregnancy, Laparotomy

Introduction

Uterine leiomyoma (UL) is seen in 2.7% of pregnancies (1). With the increasing age of obstetric patients, more cases with UL are being encountered during pregnancy (2). Complications related UL include, placental abruption, preterm labor, premature rupture of membranes, intrauterine growth restriction, fetal malpresentation, obstructed labour, postpartum hemorrhage, constipation, pelvic pain, and urinary retention.

Although the most of the UL complicating pregnancy are managed conservatively, surgery is preferred if the symptoms persist despite to the conservative therapy. To the best of our knowledge we present the case with maximum number (12) of fibroids removed with laparotomy in the first trimester.

Case

A 28-year-old primigravida patient was admitted to our department with the complaints of abdominal pain and constipation. Physical examination revealed a uterus extending to above of the umbilicus. In the ultrasonographic evaluation multiple fibroids with the largest size of 16x11 cm and eleven week single fetus were detected. The biochemical tests were in normal range. The patient was hospitalized and paracetamol and nonsteroidal analgesics

were administered to relieve the symptoms. Despite to the medical treatment regime, acute severe pain was observed in the follow-up of the patient. The detailed information about the condition and treatment modalities including the surgery and possible risks was given to patient. The patient underwent emergency surgery because of acute severe pain.

Under general anesthesia a midline vertical incision extending above the umbilicus was performed. Approximately 50 cc ascites was detected. Multiple fibroids with the largest size of 16x11 cm were observed (Figure 1). All of myomas were located subserosal layer except two intramural fibroid on the anterior (4x3cm) and posterior (6x5cm) surface. All fibroids were dissected and removed. A total of twelve fibroids were removed (Figure2).

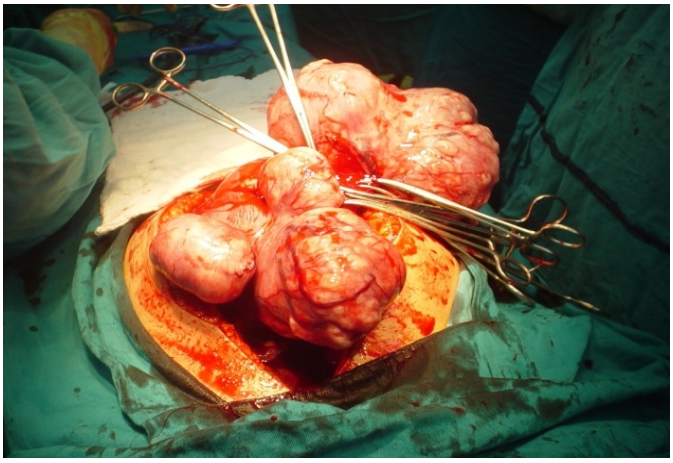

Figure1. Uterine leiomyomas before myomectomy

Figure2. All myomas removed

The remaining pelvic and abdominal organs were normally in surgical exploration. The uterine incisions were closed with multiple layers. Myometrium was closed with 1/0 vicryl, serosa was closed with 0 vicryl sutures. Excellent hemostasis was obtained. The estimated blood loss was 400 cm^3. One unit packed red cells were transfused during the surgery.

Fetal heart activity was confirmed by ultrasound immediately after surgery. Intravenous ritodrine was administered to prevent uterine contractions postoperatively. The post-operative hematocrit was 30%. The postoperative recovery was uneventful and the patient was discharged from the hospital following 6^{th} day of surgery. Pathologic diagnosis confirmed the diagnosis of myoma uteri.

The ultrasonographic evaluation showed a normally growing fetus. The patient underwent a cesarean section for breech presentation in thirty-ninth week. Image of the uterus was flawless in caesarean (Figure-3).

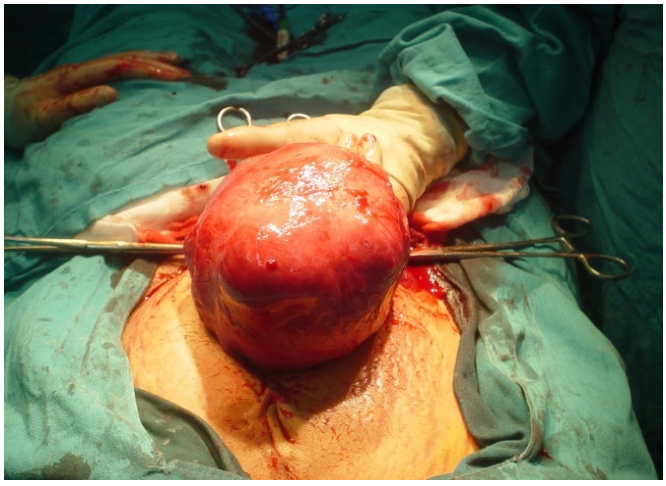

Figure3. Appearance of the uterus in caesarean section

A male baby weighing 3100 g with Apgar scores of 8 and 10 at one and five minutes, respectively. Two days postpartum the maternal hematocrit was 33% and mother and baby were discharged from the hospital uneventfully.

Discussion

The prevalence of UL during pregnancy is reported to be 2.7%. Approximately 90% of patients with UL remain asymptomatic. In the remaining of the patients, it may present itself with spontaneous abortion, premature rupture of membranes, preterm delivery, intrauterine growth restriction, placenta previa, placental abruption, fetal malpresentation, mechanical dystocia, postpartum hemorrhage, constipation, pelvic pain and urinary retention.

Patients in the first trimester with symptomatic myomas who fail to respond to conservative management may be offered induced abortion. For patients unwilling to undergo termination of pregnancy, gravid myomectomy is viewed as a last resort treatment (3).

Most symptoms can be managed conservatively and surgery is usually delayed to period of following delivery. If

symptoms persist despite conservative therapy, surgical intervention must be considered. Only 2% of patients will need surgical intervention during pregnancy (4). The most common indications for surgical treatment during pregnancy are acute severe abdominal pain not responding to conservative management and signs of compression to the neighboring organs due to increase in size (5). The majority of these surgeries were performed in the second trimester. Experience during the second trimester has suggested that myomectomy is an efficient and safe alternative if the mass does not extend to the uterine cavity.

Multiple studies have shown that women who undergo surgical intervention in the second trimester actually have better outcomes than those who opt for conservative management. Mollica et al. reported the results of comparison of patients who underwent myomectomy and conservative therapy. The pregnancy loss (0% versus 13.6%), premature rupture of the membranes (5.6% versus 22.7%), preterm labor (5.6% versus 21.6%), post-cesarean hysterectomy (0% versus 4.5%) was significantly higher in conservative group. Moreover the conservative group had a higher cesarean section rate compared to the pregnant women without uterine myomas (34% vs. 16.3%, respectively) (6). The two main complications of myomectomy during pregnancy that occurred in a small number of cases were spontaneous abortion and hemorrhage (7). In our patient the estimated blood loss was 400 cm^3 and one unit packed red cells were transfused during the surgery.

Although myomectomy is a safety procedure in second trimester, there is not available sufficient data about the safety of myomectomy in first trimester. Patients in the first trimester with symptomatic myomas who fail to respond to conservative management may be offered induced abortion. For patients unwilling to undergo termination of pregnancy, gravid myomectomy is viewed as a last resort treatment (3).

A few myomectomies have been reported during the first trimester (3, 8). The largest myoma removed during pregnancy in second trimester weighed 12.010 g (9). Our case is the most numerous fibroids during pregnancy, is removed in first trimester so far.

The most feared complications, after the myomectomy during pregnancy, are fetal loss and uterine rupture. Obstetricians also worry about is the risk of stretch and separation of incision area due to the uterine growth during pregnancy. We didn't see any separation on incision areas and any adhesion formation during the cesarean. We believe that our experience with the patient that was applied multiple myomectomy at the first trimester, could be encourage our colleagues.

References

1. Qidwai GI, Caughey AB, Jacoby AF. Obstetric outcomes in women with sonographically identified uterine leiomyomata. Obstetrics and Gynecology 2006; 107(2): 376-382.

2. Ardovino M, Ardovino I, Castaldi MA, Monteverde A, Colacurci N, Cobellis L. Laparoscopic myomectomy of a subserous pedunculated fibroid at 14 weeks of pregnancy: a case report. Journal of Medical Case Reports 2011; 5(1): 545-547.

3. Leach K, Khatain L, Tocce K. First trimester myomectomy as an alternative to termination of pregnancy in a woman with a symptomatic uterine leiomyoma: a case report. Journal of Medical Case Reports 2011; 5(1): 571-573.

4. Bhatla N, Dash BB, Kriplani A, Agarwal N. Myomectomy during pregnancy: a feasible option. The Journal of Obstetrics and Gynaecology Research 2009; 35(1): 173-175.
5. Lolis DE, Kalantaridou SN, Makrydimas G, et al. Successful myomectomy during pregnancy. Human Reproduction. 2003; 18(8): 1699-1702.
6. Mollica G, Pittini L, Minganti E, Perri G, Pansini F. Elective uterine myomectomy in pregnant women. Clinical and Experimental Obstetrics Gynecology. 1996; 23(3):168-172.
7. Lolis DE, Kalantaridou SN, Makrydimas G, et al. Successful myomectomy during pregnancy. Human Reproduction 2003; 18(8): 1699–1702.
8. Bonito M, Gulemì L, Basili R, Roselli D. Myomectomy during the first and second trimester of pregnancy. Clinical and Experimental Obstetrics Gynecology. 2007; 34(3): 149-150.
9. Macciò A, Madeddu C, Caffiero A, Paoletti AM. Successful pregnancy following myomectomy of a giant uterine myoma: role of a combined surgical approach. Arch Gynecol Obstet. 2012; 285(6): 1577-1580.