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## Letter to the Editor

# *Assessment of Pregnancy Outcomes with Uterine Leiomyomas Larger Than 10 cm; Antepartum and Postpartum Complications*

Dear Editor,

We have found that the increased number of premature deliveries and cesarean deliveries, as well as the increase in postpartum bleeding and infections such as endometritis, may be caused by large uterine myomas. Sonograms in patients with fibroids were reviewed between 2007 and 2009 in the Department of Obstetrics and Gynecology at Ege University to determine the number of fibroids, their sizes, their locations, and relationship with the placenta. Cesarean ratio, preterm loss of pregnancy, and the incidence of postpartum complications were also evaluated.

Our study population consisted of 21 women with uterine leiomyomas larger than 10 cm (12 subserous, 8 intramural, and 1 submucosal). The median age of patients was 34.6 years. Among patients with fibroids, 2 of the cases resulted from assisted conception. Tocolytic treatment was required in 47% of the pregnancies. Retroplacental localization of myomas was explored in 6 cases, and preterm delivery occurred in 2 of them. Cesarean section had to be performed because of preterm membrane rupture (9%) and malposition (29%) in 8 patients. Only 5 patients attempted vaginal delivery (23%), although in recent studies, median vaginal delivery rates range from 49% to 61%.<sup>1,2</sup> Multiple myomas were identified in 66% of pregnant women and were associated with increased risk of malposition, breech presentation, and severe postpartum bleeding when compared to published articles including women with anatomically normal uteruses.<sup>3</sup> Myomectomy at the time of cesarean delivery was performed in 33% of patients only for pediculated subserosal myomas.

In 1 case, postpartum fever occurred 2 weeks subsequent to cesarean delivery. The patient did not respond to intravenous antibiotic therapy and intracavity fluid collection, which was explored

under pelvic ultrasonographic examination owing to impaired drainage of the uterine cavity. Hysterectomy was performed, and pathology revealed infarction and acute inflammation of the leiomyoma (Fig. 1).

Oidwai et al reported that the presence of leiomyoma was associated with increased risk for cesarean delivery, breech presentation, malposition, preterm delivery, placenta previa, placental abruption, pain (degeneration), and severe postpartum hemorrhage.<sup>3</sup> However, premature rupture of membranes, operative vaginal delivery, chorioamnionitis, and endomyometritis were not found to be associated with leiomyoma. But in contrast to these findings, Lee et al demonstrated the relationship between leiomyomas



**Fig. 1.** A 37-year-old patient underwent hysterectomy in the postpartum period because of impaired drainage of the uterus caused by a submucosal component of an infected leiomyoma.

113 and endometritis and suggested if the reason for  
 114 **Q1** fever is not found, endometritis should be taken into  
 115 consideration in pregnant women known to have  
 116 uterine myomas during pregnancy and in the  
 117 puerperium.<sup>4</sup>

118 Myomectomy at the time of cesarean delivery is  
 119 associated with significant hemorrhage and should  
 120 be performed with caution and only in selected pa-  
 121 tients. Cobellis et al compared myomectomy at the  
 122 time of a cesarean and outside pregnancy and sug-  
 123 gested that it is associated with more linear and  
 124 well-defined scars than if it is performed during cesar-  
 125 ean section.<sup>5</sup> In our clinic, myomectomy at the time of  
 126 cesarean delivery is not performed except in the case  
 127 of pedunculated fibroids.

128 Myomas of the uterus are the most common benign  
 129 tumors of the uterus. They have been found to be asso-  
 130 ciated with menstrual disorders and pelvic pain, and  
 131 they negatively affect fertility and pregnancy outcome.  
 132 Management, complications, and behaviors of uterine  
 133 myomas should be well known by obstetricians.

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136 The authors declare no conflict of interest.

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