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## Myomectomy in early pregnancy—a case report

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**Abstract** Uterine leiomyomas are by far the most common benign tumours of the female genital tract. The true incidence of leiomyomas during pregnancy is, however, unknown. Although leiomyomas usually remain asymptomatic during pregnancy, they may complicate its course. The management of leiomyoma during pregnancy is medical, but, in rare circumstances, surgical intervention and myomectomy may be required. A case of myomectomy in early pregnancy is described.

**Keywords** Leiomyoma · Myomectomy · Pregnancy

Uterine leiomyomas are by far the most common benign tumours of the female genital tract. The prevalence rates vary from 20–50% of women, depending on age, ethnicity, parity and method used to assess their presence [1]. The true incidence of leiomyomas during pregnancy is, however, unknown, but reported rates vary from as low as 0.1% of all pregnancies to higher rates of 12.5% [2].

Although leiomyomas usually remain asymptomatic during pregnancy, they may complicate its course [2, 3]. At this time, the growth and behaviour of uterine leiomyomas during pregnancy cannot be predicted. The management of leiomyoma during pregnancy is medical, but, in rare circumstances, surgical intervention and myomectomy may be required [4].

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### Case report

A 37-year-old woman, gravid 2, para 3 (a past history of a twin pregnancy with foetal death in utero at term and a vaginal delivery), came to the emergency room with a 6-week pregnancy, complaining of moderate vaginal bleeding and pelvic pain. On examination, a prolapsed, pedunculated leiomyoma, measuring 4 cm×6 cm was detected. The complete blood count showed a haemoglobin concentration of 11.8 g/dl and a haematocrit level of 33%. Pelvic sonography showed a uterus with an embryo 10.5 mm in a craneo-caudal position and a prolapsed pedunculated leiomyoma of 41.5 mm×44.7 mm within the cervix in the vagina (Fig. 1).

Operative hysteroscopy was performed in an ambulatory setting. The procedure was done with a 5.5 mm, continuous flow, hysteroscopy system with a 5-French working channel permitting the passage of a Versa Point bipolar device (Gynecare, Ethicon, Somerville, N.J., USA). We used a twizzle electrode for coagulating and cutting. We introduced the hysteroscope just inside the canal until the internal hole and then we sectioned the stalk. We kept the input pressure below 100 mmHg, using an electronic pump for irrigation and aspiration (Endomat, Karl Storz, Tuttlingen, Germany). Operating time was 20 min. The leiomyoma measured 4 cm×6 cm, with a 2 cm stalk. The histological examination confirmed the leiomyomatous characteristics of the tumour. The patient was discharged on the day after the procedure, asymptomatic and with the prescription of amoxicillin as a prophylactic antibiotic for 8 days.

The pregnancy progressed to term without further complications. She had a normal vaginal delivery with a normal labour at 38 weeks of gestation, and a healthy female infant was born, weighting 3.300 g.

### Discussion

Controversy persists among reports of myomectomy being performed during pregnancy. We describe the case of a



**Fig. 1** Pelvic sonogram

successful myomectomy performed during the first trimester of pregnancy.

In this case surgical management of the leiomyoma was required, on the basis of the leiomyoma's characteristics and the presence of symptoms. Surgical resection of leiomyomas should be reserved for those pregnant women with symptomatic pedunculated leiomyomas with a small stalk [5].

With improvements in endoscopic surgical technology, most intracavitary leiomyomas can be resected via surgical hysteroscopy in an ambulatory setting in non-pregnant women. As the tumour protrudes completely into the vagina via a stalk, a hysteroscopic resection is by far the most cost-effective method for its removal.

In cases where conservative treatment cannot be chosen it seems that the risk of spontaneous abortion during pregnancy is not significantly increased when myomectomy is performed in carefully selected patients, according to the literature.

## References

1. Fletcher MH, Frederick J (2005) Abdominal myomectomy revisited. *Prog Obstet Gynaecol* 16:277–286
2. Cooper NP, Okolo S (2005) Fibroids in pregnancy—common but poorly understood. *Obstet Gynecol Surv* 60:132–138
3. Oruc S, Karaer O, Kurtul O (2004) Coexistence of a prolapsed, pedunculated cervical myoma and pregnancy complications: a case report. *J Reprod Med* 49:575–577
4. Lolis DE, Kalantaridou SN, Makrydimas G, Sotidiaris A, Navrozoglou I, Zikopoulos K et al (2003) Successful myomectomy during pregnancy. *Human Reprod* 18:1699–1702
5. Phelan JP (1995) Myomas and pregnancy. *Obstet Gynecol Clin North Am* 22:80–85