Practice | Five things to know about ...

Uterine fibroids in pregnancy

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- As many as 10% of pregnant people have uterine fibroids

 Most fibroids are small (< 5 cm) and remain stable in size. Although 30% of fibroids will increase in response to hormonal changes of pregnancy, most typically regress postpartum. Fibroids are usually asymptomatic; complications increase with more and larger fibroids.
- **The most common complication is pain with degeneration**Pain occurs when a fibroid outgrows its blood supply, leading to ischemia. Patients present with acute localized severe pain, usually in the first half of pregnancy, and typically require analgesia with acetaminophen, short-course nonsteroidal anti-inflammatories (before 32 weeks) or opioids. Ultrasonography may show fibroid degeneration, which does not harm the pregnancy.
- Most fibroids do not affect fertility or increase miscarriage rate Submucosal fibroids, which can distort the uterine cavity, are the least common subtype. They are first suspected when fibroids close to the endometrium are identified on transvaginal ultrasonography. After confirmation by sonohysterography, a referral to gynecology is required, as submucosal fibroids have been associated with decreased rates of implantation and clinical pregnancy and increased rates of miscarriage.³
- A previous myomectomy may prompt cesarean delivery

 After myomectomy, incidence of uterine rupture in subsequent labour is low (< 1%), regardless of whether vaginal or cesarean delivery is attempted. However, many obstetricians still suggest cesarean deliveries if substantial myometrium has been entered previously, and patients considering myomectomy before child-bearing should be informed of this. 4
- Vaginal delivery should be offered unless a large fibroid obstructs the cervix or leads to persistent fetal malpresentation

Complications at delivery include increased risk of breech presentation and postpartum hemorrhage.⁵ Ultrasonography at term showing the presenting fetal part above the fibroid suggests a need for cesarean delivery. Fibroids may be removed at cesarean delivery (cesarean myomectomy) by an experienced obstetrician; however, this is not a primary indication for cesarean delivery.⁶

References

- Vitagliano A, Noventa M, Di Spiezio Sardo A, et al. Uterine fibroid size modifications during pregnancy and puerperium: evidence from the first systematic review of literature. *Arch Gynecol Obstet* 2018;297:823-35.
- Lam SJ, Best S, Kumar S. The impact of fibroid characteristics on pregnancy outcome. Am J Obstet Gynecol 2014;211:395.e1-5.
- Carranza-Mamane B, Havelock J, Hemmings R; Reproductive Endocrinology and Infertility Committee. The management of uterine fibroids in women with otherwise unexplained infertility. J Obstet Gynaecol Can 2015;37:277-85.
- Odejinmi F, Strong S, Sideris M, et al. Caesarean section in women following an abdominal myomectomy: A choice or a need? Facts Views Vis Obgyn 2020;12:57-60.
- Zhao R, Wang X, Zou L, et al. Adverse obstetric outcomes in pregnant women with uterine fibroids in China: a multicenter survey involving 112 403 deliveries. PLoS One 2017;12:e0187821. doi: 10.1371/journal.pone.0187821.
- Goyal M, Dawood AS, Elbohoty SB, et al. Cesarean myomectomy in the last ten years; a true shift from contraindication to indication: a systematic review and meta-analysis. Eur J Obstet Gynecol Reprod Biol 2021;256:145-57.

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