



TERM PREGNANCY COMPLICATED BY LARGE LOWER SEGMENT SUBSEROSAL FIBROIDS: A COMPARATIVE SURGICAL PERSPECTIVE

Obstetrics & Gynaecology

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ABSTRACT

Aim & Objective: To discuss and compare the intra-op management in two cases of large subserosal Uterine Fibroids in patients with term pregnancy. **Background:** Uterine fibroids are common in women of reproductive age but are less frequently encountered during pregnancy. Conservative management is usually preferred; however, complications may necessitate surgical intervention. **Case Summary:** We report two cases of term pregnancy with large lower segment subserosal fibroids. In Case 1, a cesarean myomectomy was performed due to delivery obstruction. In Case 2, myomectomy was deferred due to high vascularity, and delivery was achieved via an upper segment incision and Patwardhan technique. **Discussion:** These cases highlight the surgical challenges and decision-making processes involved when managing large fibroids during cesarean section. In selected patients, cesarean myomectomy can be performed safely with favourable outcomes, whereas in others, delayed myomectomy remains a safer alternative to minimize risks such as haemorrhage and hysterectomy. **Conclusion:** Management of uterine fibroids during cesarean section must be individualized. With appropriate selection, cesarean myomectomy can be safely performed, while in high-risk cases, delayed intervention remains prudent.

KEYWORDS

Uterine Fibroids, Myomectomy, Cesarean Myomectomy, Interval Myomectomy

BACKGROUND

Uterine fibroids, benign smooth muscle tumours of the uterus, are reported in approximately 20–40% of women of reproductive age. During pregnancy, their estimated incidence is lower, ranging from 0.1% to 3.9%; however, this figure is likely underestimated due to asymptomatic cases and limitations in early detection.[1] The preferred initial management of uterine fibroids coexisting with pregnancy is conservative, emphasizing careful monitoring and counselling regarding the potential for myomectomy after delivery. This conservative approach is advocated because most fibroids remain asymptomatic throughout pregnancy.[2,3] Nevertheless, complications such as pain, red degeneration, preterm labor, obstructed labor, and postpartum haemorrhage may develop in 10–30% of cases during pregnancy, labor, or the puerperium. Therefore, individualized management, close surveillance, and appropriate patient education are essential to optimize maternal and fetal outcomes.[4]

Overview

We report two cases of large subserosal lower segment uterine fibroids in term pregnancy, presenting to triage in active labor.

Case 1: A gravida 2, para 1, living 1 (G2P1L1) woman with a history of one previous lower segment cesarean section (LSCS) three years prior, presented at 38 weeks and 5 days of gestation. She was in active labor with a known transverse uterine scar and declined a trial of vaginal birth after cesarean (VBAC).

Case 2: A primigravida patient presented at 39 weeks of gestation in active labor with cervical os obliterated by large lower segment uterine mass.

In both cases, detailed history-taking and clinical examination were performed. Basic investigations required for anaesthesia clearance were initiated promptly. The patients were prepared for emergency LSCS and were subsequently shifted to the operating theatre for surgical management.

Comparative Findings

Case 1

P/A- Uterus term size, cephalic presentation, contractions present. FHR = 144, previous transverse scar, no scar tenderness

P/V- Os 3cm dilated, 20% effaced, show present, membranes present, Fullness felt at upper lip of cervix

Intra-op:

Fibroid-7cm×5cm×4cm in size, subserosal anterior wall, lower segment fibroid of firm consistency

Incision- 3cm above previous scar & 1cm above the upper margin of uterine fibroid

Treatment-Cesarean myomectomy was performed followed by delivery of the baby as there was no space to deliver the baby with intact Fibroid. Baby delivered via cephalic presentation

Intra-op blood loss: Average
Uterus closed in two layers without much difficulty.

F/u-Patient came for follow up after 10 days & suture removal done. Patient had no complaints. Uterus was well contracted. R/v ultrasound was done to r/o recurrent fibroids.

Figure 1 shows the (a) intraoperative and (b) postoperative image of the fibroid during and after cesarean myomectomy.



Figure 1 (a): Intraoperative image of lower segment subserosal uterine fibroid of approximately 7cm×5cm×4cm at the site of the uterine incision



Figure 1 (b): Postoperative image of dissected fibroid done during cesarean myomectomy

Case 2

P/A- Uterus term size, cephalic presentation, contractions present, FHR =138, approx 15×10cm firm mass palpable in lower abdomen on anterior wall as seen in figure 2 (a)

P/V- Os 70% obliterated by large lower segment mass s/o fibroid, show present, membranes present

Intra-op:

Fibroid-16cm×13cm×10cm in size, subserosal anterior wall, lower segment fibroid reaching upto upper segment firm to soft consistency with high vascularity

Incision- Upper segment of uterus 2cm above the upper margin of uterine fibroid

Baby delivered via Patwardhan technique as shown in figure 2 (b)

Treatment-Fibroid was not removed during cesarean and was planned for interval myomectomy due to high vascularity

Intra-op blood loss: above average (approx. 1500ml)

Uterus sutured in two layers, haemostasis achieved with difficulty.

F/u-Patient came for follow up after 10 days & suture removal was done. Uterus well contracted, 28wks size, with 15×10cm mass felt p/a. Pt called for interval myomectomy after 6 months but patient did not come for follow up



Figure 2 (a): Preoperative contour of abdomen showing an additional lump other than the pregnant uterus on inspection

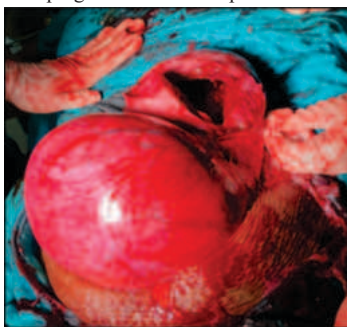


Figure 2 (b): Intraoperative image of the large subserosal Uterine fibroid occupying the lower uterine segment completely with maximum vascularity so as to the incision is taken in the upper segment of the uterus to deliver the baby.

DISCUSSION

The complications in full term pregnancies with uterine fibroids in labour include

- antepartum haemorrhage
- excessive Intra-op blood loss
- obstructed labour
- postpartum haemorrhage
- high caesarean section rates
- cesarean hysterectomy

The occurrence of complications during pregnancy, such as obstructed labor, antepartum haemorrhage, or postpartum haemorrhage, may necessitate a shift away from the standard conservative management of uterine fibroids.[5] While myomectomy during pregnancy is generally approached with caution due to the markedly increased uterine

vascularity, which significantly raises the risk of severe haemorrhage, potential hysterectomy, and even maternal mortality, it may become necessary in select cases. In situations where patients experience intractable symptoms or life-threatening complications, individualized treatment plans are essential to achieve optimal maternal and fetal outcomes. Careful case selection and surgical expertise are critical to minimizing risks and improving prognosis.[6]

Learning Points

- Evaluation of fibroids (size, location, number) is crucial before pregnancy to assess potential risks. [7]
- Each case of fibroid in pregnancy is a unique entity and needs to be dealt with in its own unique manner
- Women with large, multiple, or low-segment fibroids are at higher risk of complications and may require closer monitoring and potentially earlier intervention.[8]

CONCLUSION

Uterine fibroids in pregnancy are usually asymptomatic, and thus, the first line of management is conservative. However, in the presence of complications, good selection criteria need to be applied to individualize patient care for optimal results. Caesarean myomectomy can be performed with good results in carefully selected cases, as was obtained in this case report

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REFERENCES

1. Kim, M.J., Lee, K., Park, J.Y. et al. The trend in cesarean myomectomies and the risk of obstetrical complications in Korea. *BMC Pregnancy Childbirth* 22, 387 (2022).
2. Ghaemmaghami F, Karimi-Zarchi M, Gharebaghian M, Kermani T. Successful Myomectomy during Cesarean Section: Case Report & Literature Review. *Int J Biomed Sci.* 2017 Jun;13(2):119-121. PMID: 28824348; PMCID: PMC5542915.
3. Odejimi F, Strong S, Sideris M, Mallick R. Caesarean section in women following an abdominal myomectomy: a choice or a need? *Facts Views Vis Obgyn.* 2020 May 7;12(1):57-60. PMID: 32696025; PMCID: PMC7363247.
4. Handa N, Anjali. Feto maternal outcomes of fibroid in pregnancy: a retrospective observational study. *Int J Reprod Contracept Obstet*
5. Choudhary A, Inamdar SA, Sharma U. Pregnancy With Uterine Fibroids: Obstetric Outcome at a Tertiary Care Hospital of Central India. *Cureus.* 2023 Feb 27;15(2):e35513. doi: 10.7759/cureus.35513. PMID: 37007410; PMCID: PMC10051105. *Gynecol* 2023;12:3080-5.
6. Tinelli A, Malvasi A, Mynbaev OA, et al. The surgical outcome of intracapsular cesarean myomectomy: a match control study. *J Matern Fetal Neonatal Med.* 2014;27(1):66-71. This study evaluates the outcomes of intracapsular myomectomy during cesarean section, highlighting its safety and efficacy in selected cases.
7. Petroulakis A, Katsanevakis E, Tiong B, Ajjawi S. Huge Fibroid in Pregnancy: A Case Presentation. *Cureus.* 2024 May 3;16(5):e9566. doi: 10.7759/cureus.9566. PMID: 38707757; PMCID: PMC11066712.
8. Reis-de-Carvalho C, Lopes J, Henriques A, Clode N. Management of pregnancy in case of multiple and giant uterine fibroids. *BMJ Case Rep.* 2020 Nov 3;13(11):e235572. doi: 10.1136/bcr-2020-235572. PMID: 33148571; PMCID: PMC7640470.