Myomectomy during caesarian section: a case report

Rakshya Dhungana
Dept. of General Practice & Emergency Medicine, Pasupati Chaulagain Memorial Hospital, Charikot, Nepal

ABSTRACT

Leiomyomas are the most common benign tumors with an incidence of 2 to 4% of the reproductive tract in women of childbearing age. Myomectomy is the most common surgical operation performed. In a study that reviewed 10 years of experience in doing myomectomy during the cesarian section, about 0.89% had myomectomy. Although the Caesarean myomectomy rate is currently increasing, many doctors are reluctant to perform Caesarean myomectomy, due to potential associated risks, particularly the perioperative hemorrhage. It has been documented that a single CM is associated with a higher rate of bleeding when the leiomyoma diameter is more than 75 mm. We reported the case of a 26-year primigravida at 38 weeks of gestation who presented with pervaginal leaking and pain in the abdomen. We found she had a huge mass over the posterior wall of the uterus. A Caesarean myomectomy was performed. Histopathologically it was proven to be a fibroid uterus.

Keywords: caesarean section, fibroid uterus, myomectomy

DOI: https://doi.org/10.59284/jgpeman236

CORRESPONDENCE
Dr. Rakshya Dhungana
Dept. of General Practice & Emergency Medicine, Pasupati Chaulagain Memorial Hospital, Charikot, Nepal
Email: swet.rakshya@gmail.com

INTRODUCTION

Leiomyomas are the most common benign tumors with an incidence of 2 to 4% of the reproductive tract in women of childbearing age.[1] Myomectomy is the most common surgical operation performed. In a study that reviewed 10 years of experience in doing myomectomy during the cesarian section, about 0.89% had myomectomy.[2] Myomectomy during cesarean section is not routinely performed due to increased vascularity of the gravid uterus leading to massive bleeding, unnecessary obstetric hysterectomy, and increased perioperative morbidity and mortality. But in modern practice, there are increasingly choosing to perform myomectomy during cesarean section, thus saving the patient from future morbidity due to multiple surgeries, anesthetic complications, and economic burden.[3] Although the Cesarian myomectomy rate is currently increasing, many doctors are reluctant to perform Cesarian myomectomy, due to potential associated risks, particularly the perioperative hemorrhage.[4] It has been documented that a single CM is associated with a higher rate of bleeding when the leiomyoma diameter is more than 75 mm.[5] In pregnant women with coexisting fibroids, there are increased incidences of first-trimester losses, pressure symptoms, red degeneration, torsion of a pedunculated variant, malpresentation, preterm rupture of membranes and preterm labor during *pregnancy*, obstructed labor from a cervical or lower segment mass *intrapartum* and retained placenta, subinvolution of the uterus, postpartum endometritis, and postpartum hemorrhage in the immediate *postpartum* period.[4] Degeneration of leiomyoma occurs when there is a lack of blood supply to the fibroid and incidence increases as it grows in size. It causes an increase in morbidity rarely causing mortality. Degeneration is seen commonly during pregnancy and is known as red degeneration of the fibroid.[6] Venous infarction of leiomyoma is known as red degeneration of leiomyoma. Though management of red degeneration of fibroid is treated conservatively immediate histopathological evidence is unavailable.[7]

CASE REPORT

A 26-year primigravida at 38 weeks of gestation presented in the emergency with per vaginal leaking for 12 hours and pain abdomen. She had never visited the hospital for her antenatal checkup throughout her pregnancy. She had not done any ultrasound previously both in the pre-pregnancy state or in the antenatal period. She had no other complication related to fibroid during pregnancy and no previous admission. On per abdomen examination, the uterus was term size, with oblique lie, the fetal heart rate was 110 beats per minute and contraction was mild. On per vaginal examination, internal os was 1 cm, the cervix was uneffaced, soft, center, presenting part was very high up. Her pre-operative hemoglobin was 12.6 gm%. The fetal heart rate dropped to 90 beats per minute after 15 min of presentation. With the diagnosis of primigravida at 38 weeks of gestation with oblique lie with fetal distress we immediately shifted the patient for an emergency lower segment caesarean section. A healthy female baby was delivered with 2500 gm and Apgar scores of 7 and 9 at 1 and 5 min. After the baby was delivered, we observed a huge mass in the posterior aspect of the uterus which was 170 mm x 120mm. (Figure 1) The mass was pedunculated with a broad peduncle with a thickness of peduncle of about 60mm and adherent to the pelvis. We separated the mass from the pelvic wall. After the separating the mass, we suspected it to be a huge fibroid. We counseled the patient party about the patient's condition and what was found during the procedure. We also counseled regarding the pros and cons of doing the procedure and consent was taken from patient husband, then myomectomy was done. (Figure 2) The fibroid was removed and the base of the fibroid was tightened. (Figure 3) The uterus was atonic and there was oozing from the base so we increased the oxytocin drip. Injection carboprost 250 mcg was given intramuscularly as well as intramyometrial. As the oozing still persisted from the base of the myomectomy even after the tone of the uterus was well maintained, the bilateral uterine artery was ligated and hemostasis was maintained. The abdomen was closed. The vital of the patient were well maintained throughout the intraoperative period. After the procedure, we grossly examined the sample. It weighed to be 1200 gm and on dissection, it was found to have grey-white and whorled cut surface with blackish discoloration in the center which was suspected to be necrosis. A sample was sent for histopathology. Post-operative hemoglobin was 10gm%. The postoperative period was uneventful and the patient was discharged after 3 days. Patient followed up on 2nd week and on follow-up, there were no issues. The histopathological report showed the sample as a fibroid with hyaline degeneration.

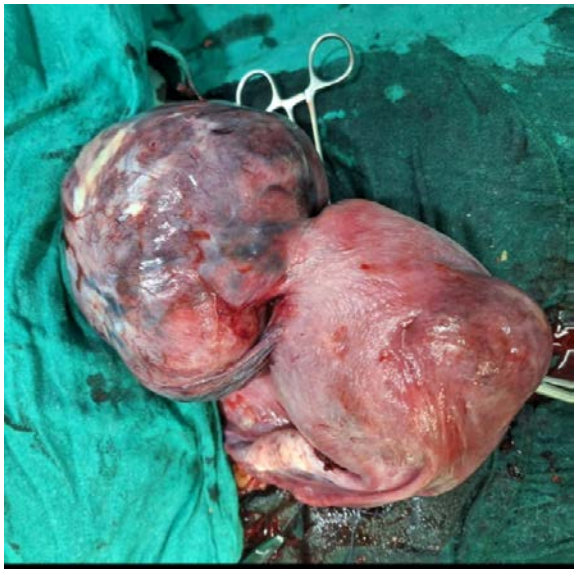

Figure 1. Huge mass in the posterior aspect of the uterus

Figure 2. Showing base of the uterus from where myoma was excised

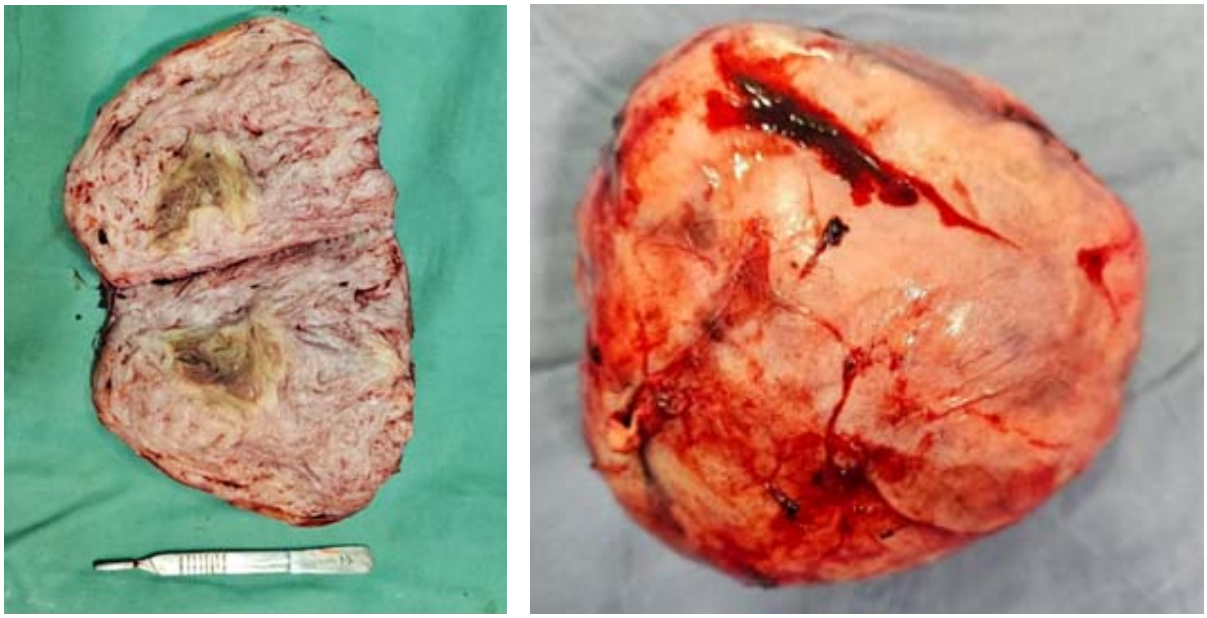

Figure 3. Gross picture of myoma dissected and cut surface area showing necrosis in center

DISCUSSION

There was a long-standing belief that myomectomy should be avoided due to fear of complications like severe hemorrhage leading to hysterectomy.[1] Usually there is minimal complication during pregnancy and only 10 to 40% will present with complications. There is no research supporting myomectomy during pregnancy but there are few cases reported where myomectomy is done where there are severe symptoms even after conservative management. Till the last decades, it was an absolute contraindication to do a caesarean myomectomy due to the risk of severe hemorrhage but now research shows consideration of caesarean myomectomy many drug and procedure was introduced to prevent severe hemorrhage like drugs carboprost, misoprostol which is widely available and surgical ligature and harmonic scalpel. [2] There are greater complications of severe bleeding leading to hysterectomy during a caesarean hysterectomy.[8] There are many studies to conclude that it was safe to perform caesarean myomectomy which benefits the patient as there is only one operative procedure, a risk for two surgeries with anesthesia, mortality, mobility is definitely more.[4] Research done with retrospective analysis shows the safety of the caesarean myomectomy.[9]

CONCLUSION

We should always consider the cesarean myomectomy whenever required. It is ideal to perform a cesarean myomectomy in a developing country like ours with a low-resource setup to avoid additional surgery and justify the cost-effectiveness.

Consent

Written informed consent was taken from the patient.

Conflict of Interest

None

REFERENCES

1. Garg P, Bansal R. Cesarean myomectomy: a case report and review of the literature. J Med Case Rep. 2021;15(1):193. | DOI |
2. Ghaemmaghami F, Karimi-zarchi M, Gharebaghian M, Kermani T. Successful myomectomy during cesarean section: case report & literature review. Int J Biomed Sci. 2017;13(2):119-21. | PubMed |
3. Kwawukume EY. Myomectomy during cesarean section. Int J Gynecol Obstet. 2002;76(2):183-4. | DOI |
4. Awoleke JO. Myomectomy during caesarean birth in fibroid-endemic, low-resource settings. Obstet Gynecol Int. 2013;2013: 520834. | DOI |
5. Tinelli A, Nezhat CH, Likić-ladjević I, Andjić M, Tomašević D, Papoutsis D, et al. Myomectomy during cesarean section or non-caesarean myomectomy in reproductive surgery: this is the dilemma. Clin Exp Obstet Gynecol. 2021;48(6):1250-8. | DOI |
6. Bhave NV, Shah PK, Chaudhari H. An unusual presentation of degenerating fibroid. Int J Reprod Contracept Obstet Gynecol. 2016;5(2):582-5. | Google Scholar |
7. Nakai G, Yamada T, Hamada T, Atsukawa N, Tanaka Y, Yamamoto K, et al. Pathological findings of uterine tumors preoperatively diagnosed as red degeneration of leiomyoma by MRI. Abdom Radiol. 2017;42(7):1825-31. | DOI |
8. Ma PC, Juan YC, Wang ID, Chen CH, Liu WM, Jeng CJ. A huge leiomyoma subjected to a myomectomy during a cesarean s section. Taiwan J Obstet Gynecol. | DOI |
9. Mohamed AH, Elmongy NF. Myomectomy during caesarean section: is it effective and safe procedure? Int J Med Arts. 2022;4(4):2287-92. | DOI |