

Cesarean Myomectomy: Transforming Outlook

Aparna Jha¹, Amrutha Pentakota², Madhva Prasad³

Received on: 09 February 2023; Accepted on: 15 March 2023; Published on: 04 December 2023

ABSTRACT

Objective: To describe the clinical characteristics, obstetric parameters, intraoperative findings and postoperative issues among patients with fibroid in pregnancy who were considered for cesarean myomectomy.

Materials and methods: A prospective observational study conducted in a private maternity home under one senior consultant for a period of 4 years. After taking consent, pregnant with fibroid uterus that underwent a cesarean section (CS) were taken as study population. Women with miscarriages who did not reach viability and viable pregnancies who delivered vaginally were excluded from the study. Demographic details, obstetric parameters, intraoperative findings and postoperative issues were studied.

Results: A total of 12 cases were recruited for the study. However, cesarean myomectomy was successful in 10 cases. About two cases were deferred on table due to inaccessible nature and highly tortuous vascularity. The average age of the study population was 34.1 years. Out of 10 only 1 had previous living issue. Out of the 10 cases, elective C-section was performed in all except for two, who underwent a vaginal trial. Diabetes and hypothyroidism were the comorbidities noted. About 8 had upper segment fibroid while 2 had lower segment location. A low transverse incision was taken for cesarean in all the cases. And 9 patients presented with longitudinal lie where as 1 patient presented with transverse lie. About 60% of the patients presented with multiple fibroids while 40% of them presented with solitary fibroid. Five cases presented with pure intramural location of fibroid, 3 cases with a mix of intramural + subserosal, 2 cases with purely subserosal variety. Breech extraction in 2 cases, instrumental delivery in 2 cases and atonic postpartum hemorrhage (PPH) in 1 case were the complications observed. Liberal blood and blood products were transfused as per demand. None of the patients required an ICU admission. Only baby required NICU care for preterm birth. Postoperative stay was prolonged in two cases for a couple of more days.

Conclusion: From the patient's perspective of avoiding separate operative procedures for fibroid uterus, the CS can be used as an opportunity to perform myomectomy when a small risk of blood transfusion is acceptable.

Keywords: Cesarean myomectomy, Fibroid In pregnancy, High risk pregnancy, Myomectomy, Opportunistic myomectomy.

Journal of South Asian Federation of Obstetrics and Gynaecology (2023): 10.5005/jp-journals-10006-2346

INTRODUCTION

In gynecological practice, fibroids, also known as leiomyoma, myoma, are ubiquitous. Giuliani in their review stated that almost 75% of women have fibroids and around 30% are likely to present with severe symptoms.¹ In the Indian context, the prevalence of fibroid according to the National Family Health Survey – 4 (NFHS – 4) is around 20% among those undergoing hysterectomy and may be higher in other selected population.² Subfertile women are 3–4 times more likely to have fibroids compared with women with normal fertility.³

In a latest large cohort study, it has been established that the presence of fibroids increases the risk of preterm birth (<37 weeks) 2.27 times, extreme preterm birth (22–27 weeks) 20.09 times, and the risk of cesarean section (CS) 1.83 times.⁴

However, the coexistence of fibroids in pregnancy was seldom noted in the olden days. Late age at conception, improved fertility treatment options and advanced diagnostic technology, all contribute to the new challenge of “Fibroids in pregnancy” to the obstetricians (Table 1).⁵

A latest review article (Loverro et al.) quoted the occurrence of fibroids is 20–40% in reproductive aged women. Nonetheless, its incidence is around 10% only in pregnancy.⁶ In support to this finding, Laughlin et al. in their study of epidemiology of fibroids had quoted a similar 10% prevalence of fibroids in pregnant Hispanic women.⁷ In the Indian scenario, with the context of fibroids in pregnancy, a review article by Chauhan AR, reported a prevalence of 2–11%.⁵ Moving forward, questions arose as to

^{1,2}Department of Obstetrics and Gynecology, Apollo Cradle & Children's Hospital, Bengaluru, Karnataka, India

³Department of Obstetrics and Gynecology, VIMS&RC, Bengaluru, Karnataka, India

Corresponding Author: Amrutha Pentakota, Department of Obstetrics and Gynecology, Apollo Cradle & Children's Hospital, Bengaluru, Karnataka, India, Phone: +91 9966949896, e-mail: amrutha2827@gmail.com

How to cite this article: Jha A, Pentakota A, Prasad M. Cesarean Myomectomy: Transforming Outlook. *J South Asian Feder Obst Gynae* 2023;15(6):707–712.

Source of support: Nil

Conflict of interest: None

how to manage this condition and what is the appropriate time to intervene? A couple of decades ago, in 2003, the Canadian Society of Obstetrics and Gynecologists have framed guidelines for the management of leiomyomas. As per the guideline, management options should be tailored to the requirements of women keeping in mind their age, keenness on conception, preservation of uterus, and cost criteria. With a level-2 evidence, authors suggested myomectomy is advisable in the group who wish to preserve their uterus. Coming to the pregnancy context, concerns regarding the implantation of placenta on and around the fibroid were mentioned. However, the guideline lacked clarity

Table 1: Demographic details

Case	Age (years)	Obstetric score	POG at labor (weeks)	Indication for CS	Comorbidities	
					Hypothyroid	Diabetes (T2 + GDM)
1	35	G3A2	38 + 2	Fibroid uterus	+	
2	37	Primi	39	Failed induction		+
3	34	Primi	38	Multiple fibroids		+
4	35	Primi	37 + 3	Maternal request	+	+
5	29	G2A1	37 + 4	Fibroid uterus + Breech presentation		
6	31	Primi	38	Fibroid uterus + IUGR	+	
7	27	Primi	39 + 3	Fibroid uterus		
8	40	G3P1L1A1	35 + 5	Transverse lie + Fibroid + Previous LSCS		+
9	40	Primi	39 + 3	Fibroid uterus + IVF conception	+	
10	33	Primi	35 + 5	Preterm Em CS with fetal distress		

Table 2: Investigational parameters

Case	Ultrasonography		Hemoglobin (gm/dL)	
	Location	Dimensions (cms)	Pre-op	Post-op
1	Right upper segment fibroid	10 × 12	13.6	11.9
2	Right upper segment fibroid	8.3 × 8.1	11.8	10.4
3	Fibroids in anterior wall	8.4 × 6.4	12.2	14
		15.2 × 10.6		
4	Fundal intramural fibroid	9.2 × 5.5	11.7	10.6
	Subserosal	5.8 × 4.2		
5	Right lateral fibroid	8.2 × 8.9	10.4	11.2
	Posterior wall	7.4 × 4.7		
6	Right lateral subserosal fibroid	7.5 × 5.5	12	
7	Cervical fibroid	8.7 × 7.6	10.4	12.8
8	Post-wall cervical fibroid	10.7 × 7.2	10.2	10.7
9	Posterior wall, anterior wall, fundal	4.8 × 5.1	12.9	11.1
		3.1 × 3.5		
		3.5 × 3.1		
		2.5 × 2.9		
10	Anterior subserosal fibroid	2.2 × 1.8 × 1.8	12.7	11.5
		2.3 × 2.2		

on management options for fibroid in pregnancy or performance of a cesarean myomectomy (Table 2).⁸

Dating back to 1913, the pioneer surgeon, Dr Victor Bonney performed the first reported cesarean myomectomy on a 30-year-old primiparous woman and was successful in removing six fibroids. To add on to this successful operative procedure, the lady had three more subsequent safe pregnancies (E. Jauniaux).⁹

Nevertheless, over the period of time, the management of myomas in pregnancy has remained indecipherable. Increased vascularity state of pregnancy, risk of prolonged surgeries leading

to complications like deep vein thrombosis, a probable need for massive blood transfusion (Yang et al., observed decreased survival rates of patients undergoing massive blood transfusion within 24–72 hrs; $p < 0.001$. With every 2-unit RBC transfusion, there was two-fold likelihood mortality; OR = 1.92)¹⁰ and an inevitable need for obstetric hysterectomy, etc. have all influenced the olden day obstetricians to avert cesarean myomectomy. As there are no clear-cut guidelines in this aspect, recent studies are focusing to address the lacunae in the area. From 2013, going back to 2012, Kumar et al. performed a retrospective case control study in a tertiary care teaching hospital in Karnataka, India. A total of 21 cesarean myomectomies operated were compared with a matched control group. Various parameters and outcomes were studied. The authors concluded that cesarean myomectomy is a safe procedure to perform with no major intraoperative or postoperative complications.¹¹

A review article by Vitale SG et al. in 2015 stated that even though there were no guidelines then to perform a cesarean myomectomy, it is advisable to opt for it wherever feasible and with appropriate measures (Table 3).¹²

An Indian review article by Chauhan AR, titled, “Cesarean Myomectomy: Necessity or opportunity?” studied a vast literature across the globe and suggested that in low resource settings, it is recommended to go with an opportunistic or elective cesarean myomectomy with adequate measures like blood bank facility and staff.⁵

If cesarean myomectomy was successful back in 1913, with a paramount of advancement in medical aids, facilities and equipment, does not it call for an opportunistic cesarean myomectomy as a routine practice in today’s world?

If 20% of hysterectomies are indicated due to fibroid uterus, can these be prevented?

Another major pitfall observed was, most of the literature in this field had presented retrospective data.

With this in the background, we present our prospective study on cesarean myomectomy (Table 4).

MATERIALS AND METHODS

This is a prospective study conducted in a private maternity hospital. It was an observational study over a period of 4 years. Institutional clearance was procured. All the women with fibroids in pregnancy registered under one senior consultant

Table 3: Intraoperative findings

Case	Incision	Presentation	Single/multiple	Myoma		Dimensions (cms)	Complications
				Anatomical	Location		
					Gross		
1	Lower segment	Cephalic	Multiple	Subserous	Right fundal	10 × 1	Atonic postpartum hemorrhage
					Fundal	5 × 4	
2	Lower segment	Cephalic	Single	Subserous	Right fundal	8 × 7	–
3	Lower segment	Cephalic	Multiple	Intramural	Anterior wall extending upto LUS	20 × 10	Outlet forceps extraction
					Fundal	10 × 8	
					Left corneal end	3 × 2	
4	Lower segment	Cephalic	Multiple	Subserosal	Left pseudo broad ligament	5 × 5	–
				Intramural	Anterior wall-fundus to LUS	10 × 12	
5	Lower segment	Breech	Multiple	Intramural	Fundal	2 × 3	Breech extraction
					Posterior wall	8 × 6	
					Left-sided lower body	3 × 4	
6	Lower segment	Cephalic	Single	Intramural	Lower uterine segment (Supracervical)	7 × 8	Vacuum extraction
7	Lower segment	Cephalic	Single	Intramural	Cervical	10 × 5	–
8	Lower segment	Transverse lie – Extracted as breech	Single	Intramural	Posterior wall	10 × 10	Breech extraction
9	Lower segment	Cephalic	Multiple	Subserosal	Anterior wall	5 × 5	–
				Intramural	Posterior wall	2 × 2	
						2 × 1	
						1 × 1	
10	Lower segment	Cephalic	Multiple	Subserosal	Anterior wall	5 × 4	–
				Intramural		1 × 1 (multiple)	

Table 4: Postoperative details

Case	Blood and blood products transfusion		Complications (maternal)	NICU requirement	Post-op hospital stay (days)
	PRBC	FFP			
1	1 unit	–	–	–	2
2	–	3 units	–	–	2
3	2 units	–	–	–	4
4	3 units	2 units	–	–	4
5	1 unit	–	–	–	2
6	1 unit	1 units	–	–	2
7	1 unit	–	–	–	2
8	2 units	–	–	–	2
9	–	–	–	–	2
10	–	–	–	In view of preterm	2

were included in the study after taking their consent. Women who had miscarriage or did not reach viability and those with

viable pregnancy and underwent a vaginal delivery were excluded. The demographic details, such as age, obstetric score, period of gestation at delivery, indication for CS and associated comorbidities were noted. Investigational parameters like ultrasonographic findings of the fibroid, pre and postoperative hemoglobin values were noted. Intraoperative findings are described in detail along with the challenges faced. Postoperative incidents like need for blood transfusion, prolonged hospital stay were also noted.

RESULTS

A total of 12 cases were recruited for the study. About 10 cases underwent successful cesarean myomectomy. On table, myomectomy was deferred in two cases due to inaccessible nature and highly tortuous vascularity status. The following discussions are the results of 10 cesarean myomectomies performed. The youngest patient in our study was 27 years and the oldest noted to be 40 years. The average age was 34.1 years. Out of the 10 cesarean myomectomy patients, only one patient had a previous living issue. Nine out of 10 women were either primigravidae or had previous history of abortions.

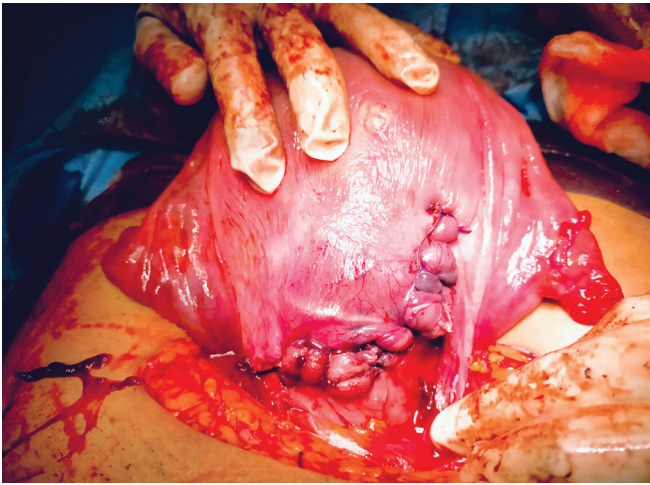


Fig. 1: Depiction of postmyomectomy

A trial of vaginal delivery was given to couple of patients. Elective C-section was performed on most of them with varied indications (absolute as well as relative), such as abnormal presentations, previous cesarean, big fibroid, preterm with fetal distress and maternal request. Diabetes and hypothyroid were the associated comorbidities in our study women. Forty percent had an association with diabetes and hypothyroidism each.

It was observed that 2 out of 10 patients had a lower segment/cervical fibroid while rest of them (8 out of 10) had an upper segment fibroid. The least concentration of hemoglobin preoperative was noted to be 10.2 mg/dL.

In all the cases, a transverse lower segment incision was taken in which a concurrent myomectomy was performed. Except for one case with a transverse lie, all the patients presented with a longitudinal lie (8 cephalic + 1 breech). The transverse lie was extracted as a breech. In the cases studied, 60% had multiple fibroids while 40% of the patients had a single fibroid. A diversified pattern of fibroid location is observed, namely, fundal, lateral wall, cornual, cervical on gross appearance. Speaking of the anatomical location, 5 cases presented with pure intramural location of fibroid, 3 cases with a mix of intramural + subserosal, 2 cases with purely subserosal variety. The largest fibroid measured 20 × 10 cm (Fig. 1). Breech extraction in 2 cases, instrumental delivery in 2 cases and atonic postpartum hemorrhage (PPH) in 1 case was noted. However, none of these complications had led the mother to ICU while one baby needed NICU care for prematurity. Most (8 out of 10) of the cases in the study required transfusion of blood or it is products postoperatively. Postoperative hospital stay was prolonged in 2 patients while the others (8 out of 10) were discharged routinely on post-op day-2.

Two cases, Case – 11 and Case – 12 were both primigravidae with fibroid uterus. Both of them underwent CS but due to the huge size of the fibroid (25 × 30 cm and 11 × 9 cm, respectively), their high vascularity status, on table, the myomectomy was deferred.

DISCUSSION

Empowered women with changing lifestyles seeking a pregnancy little later in life have become a common practice. Hence, the gynecological conditions that usually occur later in reproductive life are occurring in association with pregnancy. In our study, the

youngest age was 27 years and the oldest 40 years. The mean age was 34.1 years. Experiences of tertiary centers noted by R Zhao et al. and Ramya et al. was 32.1 ± 5.0 and 30.85 ± 3.84 14 years as the median age.^{13,14} Ramesh et al. quoted 52.38% of their patients belonged to the age group of 31–35 years.¹¹ To summarize, 30s women are commonly affected age group.

With respect to parity, 9 out of 10 women in our study were primiparae or had previous abortions. Only one patient had a previous living issue. Kumar et al. had quoted 47.62% of the patients in their study were primiparae. A similar primiparous predominance by Ramya et al., by 70% and by Zhao et al. in 2,344 cesarean myomectomies is remarkable.^{11,13,14}

With reference to gestational age, 8 patients in our study population were term gestation despite the presence of fibroids. Couple of cases presented as late preterm. Mehmet Sakinci et al. in their study concluded that the delivery week is inversely related to the size of the fibroid. However, our sample size being small, drawing such correlations was not possible. Contrastingly, Kumar et al. quoted that 71.43% of the patients in their study underwent a cesarean between 38–40 weeks. In support to this finding, large retrospective studies by Zhao et al. and Ramya et al. noted a mean gestational age of 38.4 ± 2 and 37.3 ± 1.08 weeks, respectively.^{11,13–15}

Speaking of the associated comorbidities, diabetes and hypothyroidism were the commonly associated conditions. Forty percent of our cases presented with diabetes presented and hypothyroid each. Similar set of comorbidities was noted by Ramya et al., with diabetes in 40% and hypothyroidism in 20%.¹⁴

Hemorrhage is one petrifying reason, which creates the dilemma of “for” and “against” cesarean myomectomy. However, the recent literature is suggesting that in well-equipped centers with adequate safety measures, and in the hands of experienced skilled professionals, this fear can be easily overcome and it is safe to perform cesarean myomectomy. Starting from Case reports [Tjokropawiro et al.] to Tertiary centers experience [M Sakinci et al., A Guler et al., W El-refaie, R Zhao et al., Ramya et al.] to Review and Meta-analysis [M Goyal et al., A Chauhan, Pergialiotis et al.], it was concluded that the hemorrhage or the blood loss due to cesarean myomectomy when compared with cesarean alone is statistically insignificant advising an opportunistic cesarean myomectomy. Adding to this existing data, in our study, it was ensured that the drop in hemoglobin from pre-op to post-op is not more than two points with adequate measures taken.^{5,13–20}

Pertaining to the number of fibroids, a slight predominance (60%) of multiple fibroids was noted as compared with single fibroid (40%). In contrast to our observation, Ramya et al. noted that majority were solitary myomas with only 8 out of 20 having multiple leiomyomas. Kumar et al. also presented their data consisting of 76.19% solitary leiomyomas which was not in sync with our findings.^{11,14}

Understanding the type of myomas in relation to their anatomical location, 5 cases presented with pure intramural location of fibroid, 3 cases with a mix of intramural along with subserosal, 2 cases with purely subserosal variety. A Guler et al., in their study, identified 82 and 65 patients with subserosal and intramural myomas who underwent myomectomy during cesarean with a slight predominance of subserosal. A similar subserosal predominance over intramural was noted by Ramya et al. with 11/20 and 9/20, respectively. The finding remains consistent with our series of cases as well. In a similar Indian setup, Kumar et al., 2014 observed 81.08% of the fibroids were subserosal too.^{11,14,17}

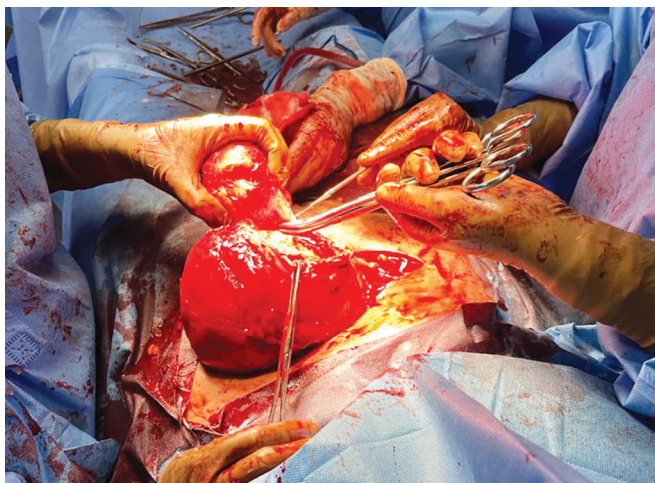


Fig. 2: Cesarean section but due to the huge size of the fibroid

With respect to myoma size, the largest dimension of the myoma in our study was 20×10 cm. The mean myoma dimension calculated was 7.32 ± 3.78 (Fig. 2). The mean myoma sizes as stated by Ramya et al. and Sakinci et al. are 8.3 ± 4.1 cm and 5.33 ± 2.08 cm, respectively.^{14,15}

Concerning the need for blood transfusion, in our study population, the transfusion of blood and blood product was optimized for an enhanced recovery of the patient wherein 8 out of 10 required it. Ramya et al. in their 20 cases of cesarean myomectomy noted that none of the patients required a postoperative blood transfusion, with 2 patients requiring intraoperative transfusion. However, when need for blood transfusion was studied in cesarean myomectomy (CM) group vs CS alone, significantly higher requirement was noted for CM [$p = 0.02$; M Goyal et al.], [$p = 0.01$; Y Huang et al.] Nonetheless, in a review article by Pergialiotis et al., the authors concluded that the need for blood transfusion did not vary widely when compared with cesarean alone group.^{14,19–21}

As regards hospital stay, 8 patients out of 10 in our study required the routine 2-day postoperative stay. Only 2 patients required an additional 2 more days of hospitalization. A systematic review by Goyal et al. stated the mean hospital stay in cesarean myomectomy group was less compared with cesarean alone group. However, it did not have a statistical significance. Sakinci et al. at a tertiary care level noted that the hospital stay is directly proportional to the size of the myoma. A similar longer hospitalization with cesarean myomectomy was noted by Y Huang et al. ($p < 0.001$). Akin, a huge review article by Pergialiotis et al. concluded that the postoperative hospitalization is certainly high in myomectomy group which of statistical significance.^{15,19–21}

One of the deferred cases (case – 11) had presented a year later to the hospital with heavy menstrual bleeding due to the fibroids and she underwent a laparoscopic myomectomy at our center. This provokes the thought of saving the patient from an extraoperative procedure and the morbidity associated with the surgery and preceding the surgery (due to the condition per se, in the present context, bleeding and compression issues due to the myoma).

CONCLUSION

From the patient's perspective of avoiding separate operative procedures for fibroid uterus, the CS can be used as an opportunity

to perform myomectomy when a small risk of blood transfusion is acceptable.

REFERENCES

- Giuliani E, As-Sanie S, Marsh EE. Epidemiology and management of uterine fibroids. *Int J Gynaecol Obstet* 2020;149(1):3–9. DOI: 10.1002/ijgo.13102.
- Shekhar C, Paswan B, Singh A. Prevalence, sociodemographic determinants and self-reported reasons for hysterectomy in India. *Reprod Health* 2019;16(1):118. DOI: 10.1186/s12978-019-0780-z.
- Somigliana E, Reschini M, Bonanni V, et al. Fibroids and natural fertility: A systematic review and meta-analysis. *Reprod Biomed Online* 2021;43(1):100–110. DOI: 10.1016/j.rbmo.2021.03.013.
- Karlsen K, Schiöler Kesmodel U, Mogensen O, et al. Relationship between a uterine fibroid diagnosis and the risk of adverse obstetrical outcomes: a cohort study. *BMJ Open* 2020;10(2):e032104. DOI: 10.1136/bmjopen-2019-032104.
- Chauhan AR. Cesarean myomectomy: Necessity or opportunity? *J Obstet Gynaecol India* 2018;68(6):432–436. DOI: 10.1007/s13224-018-1114-8.
- Loverro G, Damiani GR, Malvasi A, et al. Myomectomy during pregnancy: An obstetric overview. *Minerva Obstet Gynecol* 2021;73(5):646–653. DOI: 10.23736/S2724-606X.21.04676-5.
- Laughlin SK, Schroeder JC, Baird DD. New directions in the epidemiology of uterine fibroids. *Semin Reprod Med* 2010;28(3):204–217. DOI: 10.1055/s-0030-1251477.
- Lefebvre G, Vilos G, Allaire C, et al. The management of uterine leiomyomas. *J Obstet Gynaecol Can* 2003;25(5):396–418; quiz 419–422.
- Jauniaux E, Khan KS. Caesarean myomectomy: Victor Bonney reports the first case in 1913. *BJOG* 2014;121(2):193. DOI: 10.1111/1471-0528.12548.
- Yang JC, Wang QS, Dang QL, et al. Investigation of the status quo of massive blood transfusion in China and a synopsis of the proposed guidelines for massive blood transfusion. *Medicine (Baltimore)* 2017;96(31):e7690. DOI: 10.1097/MD.00000000000007690.
- Kumar RR, Patil M, Sa S. The utility of caesarean myomectomy as a safe procedure: A retrospective analysis of 21 cases with review of literature. *J Clin Diagn Res* 2014;8(9):OC05–OC08. DOI: 10.7860/JCDR/2014/8630.4795.
- Vitale SG, Padula F, Gulino FA. Management of uterine fibroids in pregnancy: Recent trends. *Curr Opin Obstet Gynecol* 2015;27(6):432–437. DOI: 10.1097/GCO.0000000000000220.
- Zhao R, Wang X, Zou L, et al. Outcomes of myomectomy at the time of cesarean section among pregnant women with uterine fibroids: A retrospective cohort study. *Biomed Res Int* 2019;2019:7576934. DOI: 10.1155/2019/7576934.
- Ramya T, Sabnis SS, Chitra TV, et al. Cesarean myomectomy: an experience from a tertiary care teaching hospital. *J Obstet Gynaecol India* 2019;69(5):426–430. DOI: 10.1007/s13224-019-01239-x.
- Sakinci M, Turan G, Sanhal CY, et al. Analysis of myomectomy during cesarean section: A tertiary center experience. *J Invest Surg* 2022;35(1):23–29. DOI: 10.1080/08941939.2020.1810832.
- Tjokropawiro BA, Saraswati W, Yuliati I. Successful cesarean myomecemies of large uterine fibroids: Two cases and a literature review. *Am J Case Rep* 2021;22:e931051. DOI: 10.12659/AJCR.931051.
- Guler AE, Guler ZÇD, Kinci MF, et al. Myomectomy during cesarean section: Why do we abstain from? *J Obstet Gynaecol India* 2020;70(2):133–137. DOI: 10.1007/s13224-019-01303-6.
- El-Refai W, Hassan M, Abdelhafez MS. Myomectomy during cesarean section: A retrospective cohort study. *J Gynecol Obstet Hum Reprod* 2020;26:101900. DOI: 10.1016/j.jogoh.2020.101900.
- 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;256:145–157. DOI: 10.1016/j.ejogrb.2020.11.008.

20. Huang Y, Ming X, Li Z. Feasibility and safety of performing cesarean myomectomy: A systematic review and meta-analysis. *J Matern Fetal Neonatal Med* 2022;35(13):2619–2627. DOI: 10.1080/14767058.2020.1791816.
21. Pergialiotis V, Sinanidis I, Louloudis IE, et al. Perioperative complications of cesarean delivery myomectomy: A meta-analysis. *Obstet Gynecol* 2017;130(6):1295–1303. DOI: 10.1097/AOG.0000000000002342.