

Original Research Article

FETOMATERNAL OUTCOME IN FIBROID COMPLICATING PREGNANCY

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Received : 08/11/2023
Received in revised form : 22/12/2023
Accepted : 07/01/2024

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DOI: 10.5530/ijmedph.2024.1.11

Source of Support: Nil.

Conflict of Interest: None declared

Int J Med Pub Health

2024; 14 (1); 62-65

ABSTRACT

Background: Fibroids are the most common benign smooth muscle tumours occurring in reproductive age of women. There is about 1.2-10.7% prevalence of leiomyomas affecting pregnant women. They are usually asymptomatic. Our study objective was to assess prevalence, maternal and foetal complications in fibroid complicating pregnancy.

Materials and Methods: An observational study was conducted in tertiary care centre, Government General Hospital, Guntur from June 2023 to December 2023. Convenient sampling was done. All detailed data such as demographic data, maternal age, mode of delivery, obstetrical history, maternal complications, and foetal outcome were recorded. Ethical approval was obtained from institutional ethical committee.

Results: In our study, thirty patients were included who had pregnancy with fibroid. The prevalence of fibroid complicating pregnancy in our study was 0.8%. Majority of the women are multigravida (63%), belonged to age group between 20-30 years (70%) and mostly delivered by caesarean section (89%). In most of the cases, the size of the fibroid is more than 5cm (60%), arising from the body of the uterus (97%) and are multiple in number. There was increased incidence of preterm delivery, PROM and malpresentations in our study.

Conclusion: Mostly fibroids are asymptomatic, risk increases with increase in size, number and site of the fibroid. So, prompt antenatal care, intrapartum and post-partum surveillance and management helps in combatting these complications.

Keywords: Fibroid, PPH, maternal and foetal complications.

INTRODUCTION

Uterine fibroids are the most common benign tumors. Fibroids arise from smooth muscle cells and include about 40-60% of reproductive age women.^[1] There is about 1.2-10.7% prevalence rate of leiomyomas affecting pregnant women.^[2] They are usually asymptomatic. They are diagnosed accidentally when women undergo routine ultrasound examination during pregnancy. Advancing age, positive family history are risk factors. Pregnancy outcomes are affected by factors related to fibroids such as number, size, location. These women may show nausea, vomiting, low grade fever and red degeneration which are evident

at 20-22 weeks of pregnancy. The chances of miscarriage increases in case of intramural or submucosal fibroids. Women who have fibroids have been linked to obstetric complications, sub fertility, menstrual abnormalities, and pelvic pain. Miscarriage, preterm labor, APH, mal presentation, FGR, LBW, PPH, increased incidence of surgical births and caesarean hysterectomy are among the obstetric issues are linked to fibroids during pregnancy.^[3] Complications such as endometritis, primary and secondary PPH, uterine inversion can be seen. The main objective of the study was to evaluate the effects of fibroid on maternal and fetal outcome and management of these cases during pregnancy, during labor and puerperium.

MATERIAL AND METHODS

The study was an observational, conducted in tertiary care center in Department of Obstetrics and Gynecology in Government General Hospital, Guntur from June 2023 to December 2023.

Thirty patients were included in this study by convenient sampling.

All pregnant women with fibroid diagnosed and confirmed by ultrasonography about their size and position were measured and recorded. Approval was taken from institutional ethical committee and informed written consent was taken from all patients. Data analysed under the criteria of age, parity, gestational age, mode of delivery, type of fibroid, maternal and fetal complications.

RESULTS

In our hospital out of 3680 deliveries during the study period 30 pregnancies were identified to be with fibroid so prevalence of 0.8% of fibroid complicating pregnancies were observed.

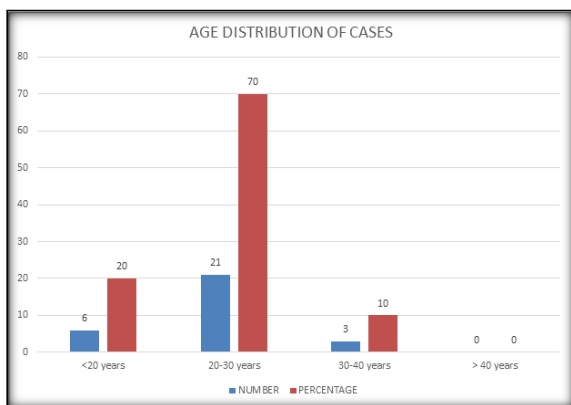


Figure 1: Age Distribution of Cases

In our study, most of the patients belong to age group of 20 -30 years [70%].

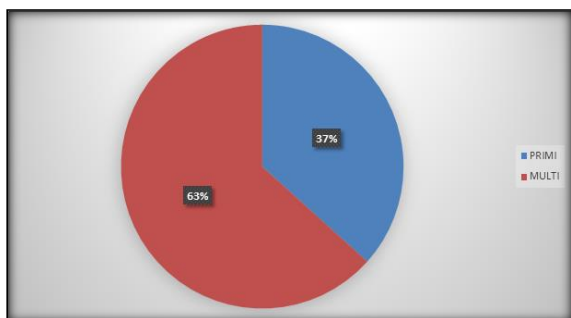


Figure 2: Distribution of Parity Among Cases

In our study, most were multiparous(63%).

Table 1: Distribution of myoma according to size in(cm)

Size In cm	Number (n)	Percentage (%)
<3 cm	3	10
3-5cm	9	30

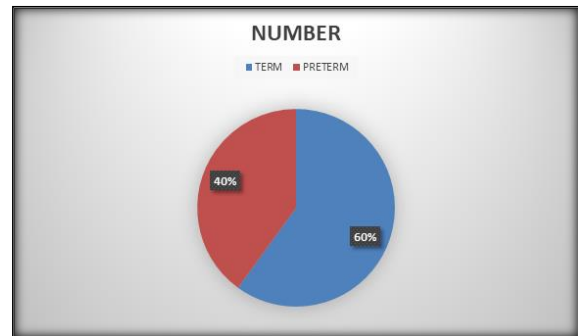


Figure 3: Gestational Age at Delivery

Only in 40% cases, preterm labor was seen which was higher than pregnancies without fibroid.

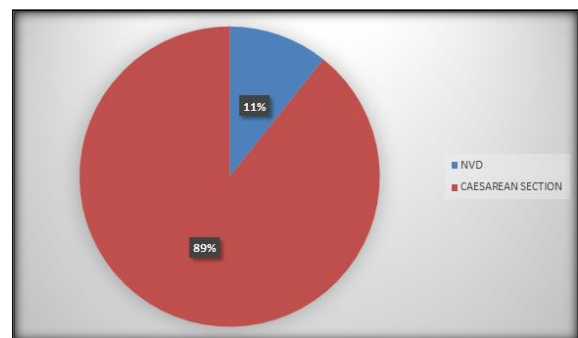


Figure 4: Mode of Delivery

In our study, caesarean section rate was higher because of small sample size, needs larger group for evaluation.

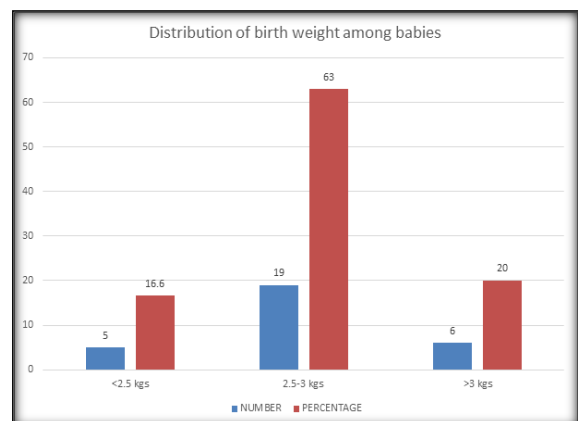


Figure 5: Distribution of Baby Weights

In our study, fibroids did not affect the fetal weight, apgar score.

>5 cm	18	60
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Fibroid Characteristics
Types of Fibroid

Table 2: Distribution of type of fibroid among cases

Type	Number(N)	Percentage(%)
Submucosal	0	0
Subserosal	12	40
Intramural	18	60

In my study, submucosal cases are not seen.

Location

Table 3: Distribution of location of fibroid among cases

Location	Number (N)	Percentage (%)
Cervical Fibroid	1	3
Body of Uterus	29	97

Maternal Complications

Table 4: Distribution of maternal complications among cases

Complications	Number[N]	Percentage [%]
Acute Abdominal Pain	3	10
Preterm Labour	12	40
Prom	3	10
PPH	2	6.6
Malpresentations	4	13.3
Degenerations	4	13.3
Miscarriage	2	6.6
Placenta Previa, Abruption	0	0

In our study, there was increased rate of preterm deliveries.

Fetal Outcome

Table 5: Fetal outcome

APGAR	Number (N)	Percentage (%)
<7	9	30
>/=7	21	70

DISCUSSION

Presence of fibroid in pregnancy is potentially a serious problem usually. But, nowadays with increased diagnostic modalities, early detection and management is possible.

Even though majority of women are asymptomatic, many of them present with varied problems and complications. Prevalence of fibroid was 0.8% in our study which is similar to the incidence of 0.1-2%, it is slightly higher than that reported by Maliwad A.K.^[3]

Majority of the cases were multigravida (63%) and of maternal age group 20-30 years which is comparable with similar other studies.^[6]

The size of fibroids varies with gestational age of pregnancy, making their detection difficult during advanced pregnancy. The incidence of abortion in our study is 6%, which is lower compared to other studies.

The proposed mechanism is altered vascular supply, affecting the foetus adversely resulting in abortion.^[7]

In pregnancy with fibroid, maternal complications such as pain abdomen (10%), PROM (10%),

preterm labour (40%), PPH (6.6%) were seen which are comparable to majority of other studies. The risk of PPH was not increased in fibroid complicating pregnancy and could be managed medically, without any need for surgical management in our study.

As far as neonatal outcome is concerned 70% of delivered babies were with good APGAR and showed good fetal outcome. About 9 babies (30%) admitted to NICU but all were discharged in satisfactory condition.

In our study, rate of caesarean section is 89% which is slightly higher than other studies,^[11] multiple fibroids, large fibroids and fibroids in lower uterine segment are predisposing factors for caesarean delivery.^[11] Indication for cesarean section in fibroid depends on location and size of fibroid. Because of our study involves small sample, it needs large study group.

Caesarean myomectomy was done in one case in present study. Depending on size, location, involvement of lower uterine segment and kind of fibroid such as subserosal fibroid, myomectomy can be performed during caesarean section in some patients.

The uterus adapts physiologically to control haemorrhage more affectively in immediate post-partum period than at any other point in women's life, which is why myomectomy during caesarean section is recommended.^[3,4]

CONCLUSION

Preterm delivery, premature rupture of membranes, miscarriage, increased incidence of caesarean section and post-partum haemorrhage are the main complications of pregnancy with fibroid. These complications can be reduced by prompt antepartum, intrapartum and postpartum surveillance. So, fibroids in pregnancy should be treated as high-risk pregnancy.

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