UTERINE FIBROIDS IN PREGNANCY

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ABSTRACT

OBJECTIVES

To determine the maternal and fetal outcomes associated with uterine fibroids in pregnancy.

METHODOLOGY

This study was conducted in the Gynaecology Department of Mardan Medical Complex from January 2018 to December 2019. All pregnant women of any age or parity or gestational age with sonographic evidence of uterine fibroids were included. Demographic details, gestational age, symptoms related to fibrosis, size, number and location of the fibroid, mode of delivery, antenatal, intrapartum and postnatal complication, and neonatal outcome were entered in a predesigned proforma.

RESULTS

The incidence of uterine fibroids in pregnancy was 0.8%.77 patients were enrolled. The mean age was 26.5 ± 3.22 years. The mode of delivery was a caesarean section in 32.4%, and vaginal delivery in 53% of patients.14% of patients miscarried. Fibroids were multiple in 58.4% and single in 41.5% of patients. Submucosal fibroids were seen in 23%, intramural in 18% and subserosal in 58% of cases. The most common maternal complication was abdominal pain (25%), followed by postpartum haemorrhage(23%) and antepartum haemorrhage(19%). Neonatal outcome was good, with 57% of babies being healthy and 9% being admitted to the Neonatal Intensive Care Unit (NICU) and discharged later.

CONCLUSION

Pregnant women with fibroids should be cautiously screened during antenatal to avoid obstetric complications.

KEYWORDS: *Fibroids, Antepartum Haemmorhage, Postpartum Haemmorhage, Pedunculated Fibroid, Degeneration Caesarean Section*

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INTRODUCTION

Uterine leiomyomata, otherwise called uterine fibroids or leiomyomas, are the commonest tumours of the human body and basically affect women of reproductive age, occurring in 40-60% of women of this group by age 35years.[1] The incidence of fibroids in pregnancy ranges from 0.1 to 10.7% of all pregnancies and increases as the female chooses to postpone pregnancy later on.[2] They are more common in Blacks as compared to Caucasians.[3] Although most women with uterine fibroids have a normal pregnancy, data from the literature suggest that they are associated with a higher risk of spontaneous miscarriage, preterm labour, placental abruption, premature rupture of

membranes, fetal malpresentation, labour dystocia, caesarean delivery, postpartum haemorrhage and hysterectomy.[4,5] Pregnancy itself has a wide-ranging impact on fibroids, including an increase in the size of fibroids in 20-30% of cases, torsion of the uterine fibroid if pedunculated, infection, and red degeneration expulsion(if submucosal and pedunculated) and necrosis.[6] These negatively impact the pregnant woman, leading to increased morbidity and hospitalization.[7] Fortunately, the neonatal outcome in viable pregnancies was reasonably good in women with uterine fibroids.[8] Because of the increased risk of complications, all the patients with fibroid having pregnancy should be considered high-risk pregnancies.[9] This study aimed to see the maternal and fetal outcomes in pregnancy complicated with fibroids and any associated complications that can occur in these patients antenatally or postnatally.

METHODOLOGY

This study was conducted in the Gynaecology Department of Mardan Medical Complex from January 2018 to December 2019. The sampling technique was non-probability purposive sampling. This was a cross-sectional study, and all pregnant women of any age, parity and gestational age with a diagnosis of uterine fibroid were included in the study. Patients planned for caesarean section for any other indication, and patients with medical conditions such as diabetes, cardiac diseases, and hypertension were excluded. Approval was taken from the hospital ethical committee. Written informed consent was taken from the patients. All the antenatal patients attending the antenatal Outpatient Department or labour room of Mardan Medical Complex with the diagnosis of uterine fibroids were considered. The uterine fibroid was confirmed by ultrasound, and location and size were recorded. Demographic details, gestational age, booking status, obstetric and fibroids history, mode of delivery, antenatal and postnatal complications and neonatal details are recorded in predesigned proforma. All the data were analyzed using SPSS 20.0. Mean $\pm$ SD were calculated for age and gestational age, and frequencies and percentages were calculated for maternal and neonatal complications.

RESULTS

Table 1: Demographic Characteristics (N=77)

Age	Frequency	Percentage
<20years	3	4%
21-30 years	51	67%
31-40years	14	18%
>40 years	9	11.6%
BookingStatus		
Booked	23	30%
Unbooked	54	70%
Parity		
Primigravida	15	20%
P2-4	54	70.6%
GrandMutigravida	8	10%
Gestational Age		
6-24 weeks	14	18%
25-30 weeks	5	6.5%
31-36 weeks	12	15%
37-40 weeks	46	60%

Table 2: Maternal Outcome (N=77)

Maternal Characteristic	Frequency	Percentage
No complication	14	18%
Abdominal pain	19	25%
Postpartum Haemmorhage	18	23%
Antepartum Haemmorhage	15	19%
Miscarriage	11	14%
Preterm Delivery	10	13%
PPROM	9	12%

****Each patient can have more than one complication

Table 3: Neonatal Outcome (N-77)

Neonatal Characteristic	Frequency	Percentage
Healthy	44	57%
Miscarriage	11	14%
NICU admission	7	9%
Intrauterine Fetal Death	3	4%
Early Neonatal Death	3	4%

DISCUSSION

The incidence of uterine fibroids in our study was 0.8%. Parazzini Fet al. reported the same incidence in their study at Egypt,[10] whereas higher rates of 14.7% and 16.7% were reported in other international studies.[11,12] A few other studies reported rates of 0.1-4%.[13] The mean age for occurrence of uterine fibroids in our study was 26.5 years. Saleh HS et al., in their study, concluded that the average age for uterine fibroids in pregnancy is 31.8 years.[2] The commonest gestational age at which 60% of the cases presented to us was 37-40 years; the same findings were recorded by a study conducted in Egypt in 2018.[2] 58.4% of patients presented with multiple fibroids The most common type of fibroid was subserosal(58%), followed by submucosal (23%). Egbe TO et al, in their study in 2018, reported subserosal fibroids in 63.7% of

cases followed by submucosal in 22% of cases which coincides closely with our study.[12] The reason might be subserosal fibroids are mostly asymptomatic, and patients are unaware of their presence until they do pelvic ultrasounds for some other indications. Myomas have been complicated by changes like degeneration leading to abdominal pain whose severity varies from mild to acute abdomen. Abdominal pain was a feature in 25% of our subjects. It was a predominant feature seen in 32% of subjects in another research,[12] whereas 12% of women presented with it in a local study.[14] 14% of cases in our study had a miscarriage, whereas higher rates of 26% and 34% were reported in other studies.[2,15] Risk of postpartum haemorrhage was seen in 23% of patients in our setting, whereas it was 26% in a previous study[14] and a much lower 14% in another study.[16] Antepartum haemorrhage was seen in 19% of subjects, whereas the figure was 18%, just like ours and as high as 57% in another study[14,17]. As far as the neonatal outcome is concerned,57% of babies were completely healthy 9% of the babies were admitted to the neonatal intensive care unit, where they were followed regularly until discharge. Eyong E et al. also reported good fetal outcomes in patients with uterine fibroids.[18] 4% of babies died in the early neonatal period and 4% were intrauterine fetal deaths,comparing well with a local study.[14] Most of the babies with poor outcomes were those who were delivered preterm.

LIMITATIONS

The study's limitations were small sample size, collection of data from a single hospital and inability to assess the clinical experience of the sonographers for homogeneity as the scan results were from different sonographers.

CONCLUSION

Patients with uterine fibroids in pregnancy should be considered a high-risk pregnancy, keeping in view the antenatal and postpartum complications involved and the high rates of operative delivery. The antenatal period of such patients should be cautiously screened through regular follow up visits to detect any adverse obstetric complications and improve the outcome.

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CONTRIBUTORS

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