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Out Come of Pregnancies Associated with Fibroids

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ABSTRACT

Aim: To evaluate the maternal and foetal outcome in women having pregnancy with fibroids.
Methods: This descriptive study was conducted in the Department of Obstetrics and Gynaecology, Bahawal Victoria Hospital Bahawalpur from June 2010 to June 2011. Data were collected on performa regarding demographic variables, obstetrical history, mode of delivery, maternal outcome, maternal complications, and foetal outcome. Mean and standard deviation were calculated for age, period of gestation and obstetrical history.
Results: Fourty patients were included in this study who had pregnancy with fibroid. Nine (22.5%) patients had no complications. Normal deliveries were achieved in 19 patients. Ten out of forty patients had caesarean section and 11 had miscarriages, while 10 (25.5%) had postpartum haemorrhage. Thirteen patients had preterm delivery and 4 patients had ante-partum haemorrhage while three (7.5%) patients had premature rupture of membranes. Seventeen (42.5%) babies were healthy. Seven (17.5%) babies delivered with morbidity. There were 5 (12.5%) intrauterine deaths and one early neonatal death.
Conclusion: Miscarriage, preterm delivery and post partum haemorrage are common in patients having pregnancies with fibroid.
Keywords: Leiomyoma, myoma, fibroid, maternal complication, foetal outcome

INTRODUCTION

Uterine fibroids are common benign tumors of the uterus affecting approximately 20% of women of reproductive age. They are therefore common in pregnancy. The true incidence of fibroids during pregnancy is unknown, but reported rates vary.[1] Different complications occurring in pregnancy with fibroids include preterm labour, dysfunctional labour, ante partum haemorrhage and post partum haemorrhage. Although these complications are common, the neonatal outcome in viable pregnancies is fairly good in women with uterine fibroids. Because of increased risk of complications, all the patients with fibroids having pregnancy should be considered as high-risk cases. The effect of uterine fibroids on pregnancy outcome is difficult to determine.[2] This is due to lack of adequate knowledge about prevalence of fibroid in pregnancy. It is a myth that fibroids increase during pregnancy. Fibroids are more common in primiparous women than in multiparous. Although most pregnancies are unaffected by the presence of fibroids, large submucosal and retroplacental fibroids seem to impart a greater risk for complications, including pain (degeneration), vaginal bleeding, placental abruption, intrauterine growth retardation (IUGR), and preterm labour[3]. Submucosal fibroid is one of the most recognized causes of infertility and abortion. Uterine peristaltic movements are partly interrupted by submucosal fibroids. These findings are considered to represent dysfunctional contractility, and may be related with pregnancy loss[4]. Uterine fibroids 5 Cm or larger are independently associated with caesarean delivery and the risk increases with the size of the fibroid.[5] The objective of this study was to evaluate the maternal and foetal outcome in women having pregnancy with fibroids in uterus and the frequency of complications associated with fibroids during the course of pregnancy.

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MATERIAL AND METHODS

This study was conducted in Gynaecology and Obstratics Units Bahawal Victoria Hospital, Bahawalpur from June 2010 to June 2011. By non-probability purposive sampling 40 patients were included in this study. All pregnant women with fibroids were included and fibroid was diagnosed by clinical grounds and ultrasonography. Pregnancies in which there was a planned caesarean section for reasons other than the fibroid in uterus were excluded. Patients with ectopic pregnancy and diseases like cardiac diseases, uncontrolled diabetes, hypertension etc were excluded from the study. All patients were admitted through casualty, OPD or private clinics meeting the inclusion criteria were enrolled in the study. Approval from ethical committee was taken and informed written consent was taken from all patients included in the study. Demographic data and complete history were recorded on pre-designed performa. Clinical examination and baseline investigations were performed and ultrasonography was done for the

confirmation of fibroid, its size and position were measured and recorded in the pre-designed performa. Patients presenting with complaints and the maternal and foetal outcome and the complications encountered were recorded with reference to the gestational age.

The data were analysed using SPSS-16. Mean±SD were calculated for age, gravidity, parity, and period of gestation. Frequencies and percentages were calculated for booking status, mode of delivery, maternal outcome, maternal complications, and foetal outcome.

RESULTS

Total 4000 patients were admitted during study period out of which 40 patients were fulfilled the inclusions criteria. Frequencies were calculated for age, booking status gestation period, obstetrical history including gravidity, parity and abortions, mode of delivery and indication for c-section, maternal complications, maternal outcome and foetal outcome. The age of the patients ranged from 20 to 45 years with mean age of 30.15±7.04 years. In which 9(22.5%) patients were booked while 31 (77.5%) were not booked.

Out of 40 patients primigavida were 9(22.5%), multigravida 17(42.5%), and grand multigravidas 14 (45%). Frequencies with Mean±SD of different periods of gestation in which patients presented is shown in Table 1. Frequency with Mean±SD of abortions in obstetrical history is shown in Table 2. Of 40 patients 19 were delivered vaginally, 10 by caesarean section and 11 had miscarriage. Sixteen (40%) patients delivered at term, 13 (32.5%) delivered preterm and 11(27.5%) had miscarriage (Table.3)

Table 1: Frequencies of gestation period (n=40)

Gestation Period	Cases (%)
≤24 weeks	10(25)
25–30 weeks	9(22.5)
31–36 weeks	5(12.5)
≥37 weeks	16(40)

Mean±SD=27.22±10.53

Table 2: Frequency of abortions in obstetrical history (n=40)

Number of abortions	Cases (%)
0	26(65)
1-2	11(27.5)
3-5	3(7.5)

Mean±SD=0.72±1.21

Table 3: Frequency of maternal outcome (n=40)

Maternal Outcome	Cases	%age
Miscarriages	11	27.5
Vaginal delivery at term	8	20
Vaginal delivery at preterm	11	27.5
Caesarean section at term	8	20
Caesarean section at preterm	2	5

Table 4: Frequency of maternal complications (n=40)

Maternal Complications	Cases	%age
Miscarriages	11	27.5
Pain Abdomen	2	5
Premature rupture of membranes	3	7.5
Ante-partum haemorrhage	4	10
Postpartum Haemorrhage	10	25
Nil	10	25

Table 5: Frequency of foetal outcome (n=40)

Foetal Outcome	Cases	%age
Normal Healthy Baby	17	42.5
Early foetal loss	10	25
Intrauterine death	5	12.5
Early neonatal death	1	2.5
Baby with morbidity	7	17.5

DISCUSSION

This study was conducted to evaluate the outcome of pregnancies associated with fibroids. As the presence of fibroids increase the risks of adverse pregnancy and foetal outcome, thus emphasizing the importance of appropriate management of this high risk pregnancy[6].

Our 40 patients had fibroid, giving an incidence of 1%. The reported incidence of pregnancies complicated by fibroid is 0.1–4%, which compares with our study[7]. Mean maternal age came out to be 30 years, which is comparable to other studies, showing occurrence of fibroid in 3rd and 4th decade of life[8]. The association of fibroids with nulliparity has been reported but may occur in multiparous females with same frequency[9,10]. During pregnancy, uterine fibroid are usually asymptomatic. They may be complicated by red degeneration, an increased frequency of spontaneous abortion, preterm labour, premature rupture of membranes, ante-partum haemorrhage, malpresentation, obstructed labour, caesarean section and postpartum haemorrhage[11–13]. Thirty pregnancies in our study had complications, while 10 (25%) remained asymptomatic. Other studies have reported up to 70% pregnancies with fibroids have complications[14].

As for as obstetrical complications are concerned, 11 out of 40 patients (27.5%) had miscarriage. This study confirmed the findings of prior study showing that spontaneous pregnancy loss rates were higher in women with fibroids[15].This also well correlated with the national study which reflect an incidence of 22% for miscarriages due to fibroid[8]. The compromising endometrial vascular supply affects the foetus adversely resulting in abortion[16].

Two (5%) patient had acute abdomen, managed conservatively. The cause of pain was most probably degeneration. Fibroid can undergo degenerative changes during pregnancy due to the effect of progesterone which induces degenerative changes[15].

In our study it was found that there is an increased risk of premature rupture of membranes and preterm delivery. Myoma may distort the shape of uterine cavity which may account for higher rates of

preterm birth and malpresentations.[15] As pregnancy advances myometrium having fibroids are overstretched and this mechanism can initiate labour and thus result in increase rate of preterm births[16].

Pregnant women with fibroid are at increased risk of placenta previa and malpresentation[3].

Regarding mode of delivery, 19 patients achieved vaginal delivery while 10 patients (25%) underwent caesarean section, (11 patients already had miscarriage). An increased risk of caesarean section in our study compares well with previously conducted studies showing caesarean section rate of 39% in patients with fibroid compared to 17% for general population.[17] Indications for caesarean section were primary dysfunctional labour, failure to progress, malpresentation and antepartum haemorrhage. In our study, 10 patients (25%) had post partum haemorrhage. The risk of post partum haemorrhage in pregnancies complicated by fibroids has been reported as 14% in a previous study[14].

Complications like intrauterine growth retardation, prolapsed of pedunculated fibroid through cervix, obstructed labour, adherent placenta, uterine inversion reported in previous studies were not observed in our study[5,18,19].

As far as neonatal outcome is concerned, 17 (42.5%) patients delivered healthy babies. There were 5 patients (12.5%) who had intrauterine death while one patient (2.5%) had an early neonatal death. All of these babies were preterm, with period of gestation less than 28 weeks.

CONCLUSION

Miscarriage, Premature rupture of membranes, preterm delivery and post partum haemorrage are the main complications in patients having pregnancy with fibroid.

Recommendations: Patients having pregnancy with fibroid should have proper antenatal visits and supervised deliveries while treatment should be taken in high risk patients before planning of pregnancy.

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