

## Pregnancy with Fibroids

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**OBJECTIVES** – To study the effects of fibroid on pregnancy outcome and effect of pregnancy on fibroids. **METHODS** – Analysis of nine cases of pregnancy with fibroids over a period of 5 years. **RESULTS** – There were two primigravidas and seven multigravidas. Two patients aborted and two had preterm deliveries. There was one still birth and one neonatal death. **CONCLUSION** – Pregnancy with fibroids results in poor outcome.

**Key words** : uterine fibroids, pregnancy with fibroids, leiomyoma

### Introduction

Leiomyoma is recognized as the most common uterine benign neoplasm. Approximately 20% of women over the age of 30 years have uterine fibroids of various sizes. Often women remain asymptomatic despite the presence of multiple fibroids, regardless of their location. Association of uterine myoma and pregnancy is not very common. Fibroids have been associated with various complications during pregnancy. They may increase in size, undergo degeneration or torsion. Fibroids are known to cause abortion, preterm labor and dysfunctional or obstructed labor<sup>1</sup>. Much of this opinion is based on small series of case reports published. Here we present a series of nine cases of pregnancy with fibroids.

### Material, Methods and Results

Data presented is from one of the working unit of the Department of Obstetrics and Gynecology.

Over a period of 5 years (1997 to 2001) we came across a total of 29 patients with fibroids during pregnancy; nine of these were with fibroids of significant size, i.e. more than 5 cm. An analysis of these 9 cases is presented. Patients with fibroids during pregnancy, undergoing voluntary abortion (MTP) are not included in the study.

During the study period of 5 years, there were a total number of 7230 confinements (deliveries and abortions) and 6186 deliveries. The incidence of fibroid with pregnancy was approximately 1 per 800 confinements and 1 per 700 deliveries.

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Table I shows the distribution of these nine cases with respect to their age. Two were primigravidas and seven multigravidas.

Two women had previous history of abortion in the second trimester while three had a history of preterm delivery. One woman with infertility had undergone a myomectomy three years back.

Three women had uterine fibroids diagnosed before pregnancy. In two women, the fibroid was diagnosed for the first time during pregnancy on abdominal examination and confirmed by sonography. In three women fibroid was diagnosed by routine antenatal sonography. In one woman it was detected only during cesarean section.

Period of gestation at the time of diagnosis is shown in Table II.

Ultrasonography was helpful not only in diagnosing the presence of fibroid with pregnancy, but also in finding out size, number and site of fibroids and their relation to the placenta.

After the diagnosis, all women were advised bed rest and given tocolytic drugs. Hematinics and folic acid supplementation were also given. Three women complaining of pain with tenderness over the fibroid were given an antibiotic with analgesics. Pregnancy and the fibroid, were monitored periodically, both clinically and by ultrasonography. Only in one woman the fibroid showed increase in size and in echo texture on sonography. She had acute pain due to degeneration, and was managed conservatively. The pain subsided after 4 days of antibiotics but she aborted after 9 days.

Two women aborted before 20 weeks. Of the other, seven women, four delivered vaginally and three required cesarean section (Table III). Out of those who

**Table I. Age**

Age in years	Number
20 to 25	3
26 to 30	4
>30	2

**Table II. Period of gestation at diagnosis**

Period of gestation (Weeks)	Number
>12	1
13 - 20	3
21 - 28	2
29 - 36	2
> 36	1

**Table III. Mode of delivery**

Mode of delivery	Number
Normal vaginal delivery	3
Forceps delivery	1
Cesarean section for fetal distress / prolonged labour	3
One needed hysterectomy for uncontrolled post-partum hemorrhage	

**Table IV. Complications in nine pregnant women with fibroids**

Complication	Number
Abortion (before 20 weeks)	2
Post-partum hemorrhage at cesarean section	1
Abruption of the placenta (still birth)	1
Premature rupture of membranes	1
IUGR	1
Preterm delivery	3
Post-partum hemorrhage	1
Stillbirth	1
Neonatal death	1
Low birth weight	2

required cesarean section, one had multiple fibroids including one on the lower segment. She had severe post-partum hemorrhage and required a cesarean hysterectomy. Three women had preterm delivery.

Complications are shown in Table IV. There was one stillbirth due to accidental hemorrhage. There was one neonatal death due to prematurity (birth weight 950 gm; gestation 29 weeks 4 days).

## Discussion

Presence of myoma during pregnancy is potentially a serious problem. Though in some cases, it does not affect the outcome of pregnancy, in many cases it leads to problems like abortion or preterm labour. Poor placentation and mechanical obstruction to fetal growth also accounts for the same. Other complications are premature rupture of membranes, placental abruption, uterine dysfunction and obstructed labour.

Matsunaga and Shiota<sup>2</sup> have found a two fold increase in the number of malformed embryos recovered from patients with uterine fibroids having termination of pregnancy.

The position of leiomyoma with respect to the placenta might predict the pregnancy outcome. Weiner-Muram et al<sup>3</sup> found that women whose fibroids were located retroplacentally, were associated with a higher incidence of adverse outcome. But Lev Toaff et al<sup>4</sup> presented a large series, where they did not find an association between the placental site in relation to fibroid and pregnancy outcome. In our study, three patients had fibroids located near the placenta. Of these, one had a second trimester abortion and one had an abruptio placentae.

Though theoretically, fibroid is known to increase in size and undergo degeneration during pregnancy, we found such changes only in one case. Even, Winer - Muram et al<sup>3</sup> had similar findings. They thought that the lack of variation in fibroid size may be due to increase in progesterone level during pregnancy which actually may decrease apparent fibroid size.

Our data is too small to draw any conclusions on the effect of fibroid on pregnancy or vice-versa. But majority of the authors agree that mean gestational age at delivery is significantly lower in patients with fibroid uterus. There is a difference of opinion about effect of position, size and site of fibroid on the pregnancy outcome. Only a large matched paired prospective analysis of pregnant women with and without myoma can prove this association.

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