



## Myomectomy Revisited: Experiences in a Teaching Hospital

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### ABSTRACT

**Introduction:** Uterine myomas are the most common benign tumors of the female reproductive tract with myomectomy being one of the major modalities of the treatment in our set up. The aim of this study was to share the experiences of open myomectomy from a Teaching Hospital.

**Methods:** A observational study was conducted from a records of myomectomy cases in the department of Obstetrics and Gynaecology at Nobel Medical College teaching Hospital from June 2014- May 2016.

**Results:** Total 38 cases of myomectomy were performed during the study period in the women most common age group being 35-39 years, followed by 30-34. The most common presenting symptoms was abnormal uterine bleeding in 15 (39.47%) followed by mass per abdomen in 10 (26.31%). The most common location of the myoma was intramural followed by subserosal, submucous. Degeneration was also noted in majority of the cases. All the myomectomies were done with Inj Vasopressin injected paracervically except in one case where tourniquet was used. None of the patients had significant post-operative morbidity except fever in the first 24 hours.

**Conclusions:** Abdominal myomectomy is a safe and effective procedure for uterine myomas for infertile women in the past but it should be offered to those desiring for uterine preservation irrespective of age and reproductive status.

**Keywords:** *abnormal uterine bleeding; degeneration; myomectomy.*

### INTRODUCTION

Uterine leiomyomas are the most common benign tumors of smooth muscles of the female reproductive tract. Although most of them are asymptomatic but 20-50% of them can cause menstrual abnormality in the form of menorrhagia, pelvic pain or pressure, colorectal or urinary complaints.<sup>1</sup> Myomas are estimated to occur with increased frequency during the later reproductive years.<sup>2</sup>

Myomectomy is a surgical procedure in which myoma is removed while the uterus is preserved in women of child bearing age.<sup>3</sup> But this concept has been changed as the organ preserving surgery is gaining popularity in the recent days.

Myomectomy can be done by laparotomy, laparoscopy, vaginally and hysteroscopically. This study focuses on myomectomy done for various myomas of the female genital tract.

### METHODS

A observational study was conducted from a records of myomectomy cases in the department of Obstetrics and Gynaecology at Nobel Medical College teaching Hospital from June 2014 - May 2016. Ethical approval was taken. The records were obtained from register from OT, Gynaecology ward and record section. All case of myomectomy was included from the study

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period. Data were collected and analysed in statistical package for social sciences for windows.

## RESULTS

Total 38 cases of myomectomy were performed during the study period were analyzed. Regarding the age group of the women ranged from 2 (5.2%) < 25 years, 3 (7.8%) 25-29 years, 10 (26.3%) 30-34 years, 15 (39.4%) 35-39 years, 40-44 years 6 (6%), and 2 (5.2%) > 45 years (Table 1). Out of them 10 were unmarried ladies. The parity was 0-2 in majority of women.

A. Age ( years)	n (%)
< 25	2 (5.2%)
25-29	3 (7.8%)
30-34	10 (26.3%)
35-39	15 (39.4%)
40-44	6 (6%)
> 45	2 (5.2%)
B. Marital Status	
Married	28 (73.6%)
Unmarried	10 (26.3%)

Presenting symptoms of the patients include 15 (39.4%) abnormal uterine bleeding, 10 (26.3%) mass per abdomen and 7 (18.4%) Dysmenorrhoea (Table 2). Some patients had more than one symptoms.

Symptoms	n (%)
Abnormal uterine bleeding	15 (39.4%)
Mass per abdomen	10 (26.3%)
Dysmenorrhoea	7 (18.4%)
Infertility	5 (13.1%)
Recurrent abortion	1 (2.6%)

With respect to location, 20 (52.6%) intramural being the commonest variety, followed by 7 (18.4%) subserosal, 4 (10.5%) submucous, 4 (10.5%) broad ligament and 3 (7.8%) cervical. Maximum number of myoma found was total 12 including intramural and subserosal. Pre-operative uterine size of 16-24 was 15 (39.4%) (Table 4).

Types	n (%)
Intramural	20 (52.6%)
Subserosal	7 (18.4%)
Submucous	4 (10.5%)
Broad Ligament	4 (10.5%)
Cervical	3 (7.8%)

**Table 4. Pre-operative uterine size.**

Pre-operative uterine size (weeks)	n (%)
≤ 10-12	4 (10.5%)
12-16	12 (31.5%)
16-24	15 (39.4%)
≥ 24-28	7 (18.4%)

Abdominal myomectomy was done successfully except for three cases of cervical myoma which was done through vaginal route. One case of vaginal myomectomy was converted to abdominal hysterectomy because of hemorrhage. Cavity was opened in 10 cases during surgery for which Cu-T was kept in 8 cases which was removed after 6 weeks.

Cut section of the myoma revealed different degeneration including 8 (21%) cystic, 3 (7.8%) fatty and 3 (7.8%) calcification.

All the myomectomies were done with Injection Vasopressin diluted in 19 ml of Saline given paracervically except in one case where tourniquet was tied in such away that it temporarily impedes the blood supply from the uterine vessels and the infundibulo-pelvic ligament . The tourniquet was released for intermittently at about 20 minutes interval and then it was removed after repair of the uterus.

Duration of operation was between 60-80 minutes depending on the location and size of the myoma and operative blood loss varied from 300-600ml. and only one case had blood loss of > 800ml that ultimately required abdominal hysterectomy. None of the patients had significant post-operative morbidity except for fever in the first 24 hours.

## DISCUSSION

Abdominal myomectomy is an old surgical procedure and a well established alternative to hysterectomy for women to preserve their fertility.<sup>4,5</sup> It was a feared practice in older days and thus limited for reasons of fertility. But this concept has been changed in the recent era as organ preserving surgery is gaining popularity. So it should be offered to women who want to preserve the uterus despite their age and reproductive status. As different studies concluded that myomas are the tumors occurring in reproductive age < 35, this necessitates removal of the tumor alone.<sup>6,7</sup>

Though myomectomy was considered appropriate surgical modality in young age but here it was done in women beyond the age of 40 and few cases in the perimenopausal age in view of feeling the youth and patient satisfaction. In a study done by Radosa MP et al<sup>8</sup> showed high satisfaction and significantly lower

number of relapse after myomectomy being done in peri- and post-menopausal women. However a chance of recurrence must be perceived in all these young women. Studies have shown that all the myoma above 10 weeks or multiple myomas have predisposition for recurrence.<sup>9</sup>

Here we have done almost all the myomectomies with Inj. Vasopressin diluted in 19 ml of Saline injected paracervically that reduced our operative time because of increased clarity of the surgical field. Local administration of Vasopressin is a safe and effective hemostatic technique for controlling regional blood flow from the uterine vessels to the peripheral vessels, without having a significant effect on systemic circulatory dynamics. Several studies showed that using vasoconstrictive agents during myomectomy reduces the operative time.<sup>10,11</sup>

Pregnancy after myomectomy is possible but it was not that significant in our study as women of our society fear cohabitation in the immediate post operative period and afterward. In the study conducted by Soriano D et al<sup>12</sup> showed that pregnancy rate before myomectomy was 20% and 70% after myomectomy and pregnancy loss was 69% and 85% and live birth rate was 30% and 75% respectively. This appears to be an additional benefit of myomectomy.

## CONCLUSIONS

Abdominal myomectomy is a safe and effective procedure for uterine myomas for infertile women in the past but it should be offered to those women desiring for uterine preservation irrespective of age and reproductive status

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