

# Uterine leiomyomata-management in a tertiary care centre

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## Abstract

**Aim:** To evaluate and study the management of uterine leiomyoma (fibroids) in a tertiary care center in South India.

**Objectives:** To study the epidemiology, clinical features, gross and microscopic characters, histopathology of endometrium, other associated factors like obesity, HTN(Hypertension), DM(Diabetes Mellitus), and usage of OCP's, and various modalities of management of fibroids in uterus. **Methodology:** A prospective study was carried out on 110 cases of uterine leiomyoma (fibroids) by us in Indian women who came to our hospital in Secunderabad. Various aspects like age at diagnosis, clinical features, associated medical disorders, and modalities of management were studied over a period of 2 years, i.e. from July 1<sup>st</sup> 2012 to 30<sup>th</sup> June 2014. **Results and Conclusion:** The various results spanned from, similar to markedly varied, when compared to standard western textbook data.

**Keywords:** Epidemiology of fibroid, Fibroid, India, Leiomyomauteri.

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Gandhi Medical College, a tertiary care institution in Secunderabad, during the period from July 1<sup>st</sup> 2012 to June 30<sup>th</sup> 2014, i.e. over a span of two years. Informed written consent was taken from all the patients and ethical clearance was taken from the Ethics Clearance Committee of Gandhi Medical College, Secunderabad, which is affiliated to the NTR University of Health Sciences, Vijayawada. A prospective, observational study was carried out on 110 cases of fibroid uterus admitted to the Gynaecology ward of Gandhi medical College and Hospital, Secunderabad, and various aspects like age at diagnosis, clinical features, associated medical disorders and modalities of management were noted. Complete clinical history was noted with special attention to age, marital status, parity, presenting complaints, duration of complaints, menstrual history, obstetric history, past history, family history. Details of clinical examination was noted like weight, presence of anaemia, breast examination and complete gynaecological examination. Routine blood investigations were recorded. Ultrasonography was done with special attention to size, number, site of fibroid, endometrial thickness, and any adnexal or ovarian pathology. Some patients underwent D and C, CT and MRI. Gross features of specimens obtained were noted, after surgery, followed by histopathological report.

## INTRODUCTION

Uterine leiomyoma is a benign (non cancerous) tumor that originates from the smooth muscle layer (myometrium) and the accompanying connective tissue of the uterus. Fibroids are the most common benign tumors in females and typically found during the middle and later reproductive years. While most fibroids are asymptomatic, they can grow and cause heavy and painful menstruation, painful sexual intercourse and urinary frequency and urgency. Some fibroids may interfere with pregnancy although this appears to be very rare<sup>1</sup>. Rarely (less than one in 1000) a cancerous fibroid (leiomyosarcoma) will occur.

## MATERIAL AND METHODS

The study population included 110 cases of fibroid uterus who were admitted through the Gynaec out-patient clinic to the Department of Obstetrics and Gynaecology,

## OBSERVATIONS AND RESULTS

**Table 1: Age distribution of fibroids**

| Age (in years) | numbers    | percentage |
|----------------|------------|------------|
| <30            | 11         | 10         |
| >30-40         | 39         | 35.45      |
| >40-50         | 52         | 47.27      |
| >50-60         | 4          | 36.36      |
| >60-70         | 1          | 0.9        |
| >70            | 3          | 2.7        |
| <b>Total</b>   | <b>110</b> | <b>100</b> |
| <b>&lt;30</b>  | <b>11</b>  | <b>10</b>  |

This data shows that the commonest age group for fibroid is 40-50 years (47.27%) (PERIMENOPAUSAL) and it is rare above 60 years of age.

**Table 2: Parity distribution in patients**

| Parity       | Number     | Percentage  |
|--------------|------------|-------------|
| Nullipara    | 22         | 20%         |
| Primipara    | 16         | 14.50%      |
| Multipara    | 72         | 65.45%      |
| <b>Total</b> | <b>110</b> | <b>100%</b> |

The data shows that most women who develop fibroid are multiparas (65.45%) and least in primipara (14.5%)

**Table 3: Distribution of the presenting complaints**

| Complaints      | number    | Percentage  |
|-----------------|-----------|-------------|
| Menorrhagia     | 40        | 58.80%      |
| Polymenorrhoea  | 8         | 11.76%      |
| Polymenorrhagia | 13        | 1.55%       |
| Dysmenorrhoea   | 15        | 22.05%      |
| Metrorrhagia    | 2         | 2.94%       |
| <b>Total</b>    | <b>68</b> | <b>100%</b> |

Women with fibroid mostly presented with menstrual complaints (61.8%).

**Table 4: Distribution of various menstrual complaints**

| Complaints      | Number    | Percentage  |
|-----------------|-----------|-------------|
| Menorrhagia     | 40        | 58.8%       |
| Polymenorrhoea  | 8         | 11.76       |
| Polymenorrhagia | 13        | 1.55        |
| Dysmenorrhoea   | 15        | 22.05       |
| Metrorrhagia    | 2         | 2.94        |
| <b>Total</b>    | <b>78</b> | <b>100%</b> |

The most common menstrual complaint was menorrhagia (58.8%) and least common was polymenorrhagia (1.55%).

**Table 5: Distribution of patients according to haemoglobin**

| Haemoglobin  | number     | Percentage  |
|--------------|------------|-------------|
| <7           | 11         | 10%         |
| >7-9         | 45         | 40.90%      |
| >9-11        | 40         | 36.36%      |
| >11          | 14         | 12.70%      |
| <b>Total</b> | <b>110</b> | <b>100%</b> |

Most women with fibroid uterus presented with Hb between 7 to 9 gm%

**Table 6: Distribution by size of fibroid uterus**

| Size         | Number     | Percentage |
|--------------|------------|------------|
| <=6 wks      | 21         | 19.09      |
| >6-8wks      | 28         | 25.45      |
| >8-12wks     | 20         | 18.18      |
| >12-16wks    | 26         | 23.63      |
| >16wks       | 15         | 13.63      |
| <b>Total</b> | <b>110</b> | <b>100</b> |

Most commonly (25.45%) fibroid correspond to 6-8 weeks uterine size and least common were >16 weeks size (13.63%).

**Table 7: Distribution by number of fibroids**

| Number       | Number of patients | Percentage |
|--------------|--------------------|------------|
| single       | 86                 | 78.18      |
| 2 to 3       | 10                 | 9.09       |
| >3           | 14                 | 12.72      |
| <b>Total</b> | <b>110</b>         | <b>100</b> |

Mostly single fibroids (78.18%) were seen among patients in this study.

**Table 8: Distribution by line of management**

| Management      | Number     | Percentage  |
|-----------------|------------|-------------|
| Medical         | 24         | 21.81       |
| Surgical        | 86         | 78.18       |
| TAH             | 46         | 41.81       |
| TAH+BSO/LSO/RSO | 20         | 18.18       |
| MYOMECTOMY      | 9          | 8.18        |
| VH              | 11         | 10          |
| <b>Total</b>    | <b>110</b> | <b>100%</b> |

In this study, surgical mode of management was more common (78.18%).

**Table 9: Distribution by types of fibroid**

| Types        | Number    | Percentage  |
|--------------|-----------|-------------|
| Subserosal   | 26        | 31.7        |
| Intramural   | 20        | 24.39       |
| submucosal   | 36        | 43.9        |
| <b>Total</b> | <b>83</b> | <b>100%</b> |

Fibroids were mostly corporeal (75.45%) and rarely pedunculated (4.56%), in this study.

**Table 10: Distribution of site of fibroids**

| Sites          | Number     | Percentages |
|----------------|------------|-------------|
| Corporeal      | 83         | 75.45       |
| broad ligament | 12         | 10.9        |
| cervical       | 10         | 9.09        |
| pedunculated   | 5          | 4.56        |
| <b>Total</b>   | <b>110</b> | <b>100%</b> |

Submucosal fibroid was most common (43.9%) and intramural was least common (24.39%).

**Table 11: Distribution according to type of endometrium**

| Types                        | Number | Percentages |
|------------------------------|--------|-------------|
| proliferative                | 46     | 51.68       |
| secretory                    | 38     | 42.69       |
| atrophic                     | 3      | 3.37        |
| cystic glandular hyperplasia | 2      | 2.24        |

The endometrium was mostly proliferative (51.68%) and cystic glandular hyperplasia was seen rarely (2.24%).

**Table 12: Distribution of associated pathologies**

| Pathologies             | Number    | Percentage  |
|-------------------------|-----------|-------------|
| Adenomyosis             | 10        | 9.09        |
| ovarian pathologies     | 15        | 13.6        |
| Endometriosis           | 5         | 4.5         |
| degeneration of fibroid | 3         | 2.7         |
| endometrial hyperplasia | 2         | 1.85        |
| <b>Total</b>            | <b>35</b> | <b>100%</b> |

According to this study, mostly ovarian pathologies (13.6%) were associated with fibroids like benign cysts, PCOS, etc.,

## DISCUSSION

The present study of 110 patients with fibroid was done to find out the clinical and histopathological presentation of fibroids and evaluate their mode of management. In this study most women with fibroid were of the perimenopausal age group of 40-50 years (47.27%), and it is rare above the age of 60 years. Our findings correlate well with studies of Cramer *et al* (1990)<sup>2</sup>, and Marshall *et al* (1997)<sup>3</sup>. According to this study most women who developed fibroid were mostly multiparas (65.45%), and it was least in primiparas (14.5%), whereas as per Jeffcoate (1975) 4, uterine fibroid is mostly seen in nulliparous women. Women with fibroid mostly presented with menstrual complaints(61.8%) in this study which is higher than observed by Rubo *et al* (1985)<sup>5</sup>. The most common menstrual complaint was menorrhagia (58.8%) and least common was poly menorrhagia (1.55%) which was found to correlate with the results in a study by Madhu U (1988) 6. Most women (40.9%) with fibroid uterus presented with Haemoglobin between 7 to 9 gm %. Stovall and associates(1995)<sup>7</sup> found that heavy menstruation in uterine fibroids need not cause anaemia if iron supplementation was maintained. As regards size of fibroid 25.45 % of patients had a fibroid corresponding to 6-8 weeks uterine size, whereas only 13.63% patients had

a fibroid larger than 16 weeks size uterus. Mostly single fibroids (78.18%) were seen among patients in this study. Almost 78.18% of patients were managed by surgery which was the mainstay of treatment in this study. Total abdominal hysterectomy was done in 41.81% of patients with fibroid. Intramural fibroid was least commonly seen, only in 24.39%, whereas submucosal fibroid was the commonest and was seen in 43.9% of patients. According to this study, 75.45% patients had fibroid in the body of the uterus (corporeal), whereas pedunculated fibroid was the rarest and comprised only 4.56% of patients. A histopathological report of proliferative endometrium was found in most patients (51.68%), and only 2.24 % patients reported cystic glandular hyperplasia. According to this study, ovarian pathologies like benign cysts, polycystic ovaries, etc, were associated with fibroids in only 13.6% of patients.

## CONCLUSION

The various results of this study vary from similar findings to dissimilar findings as compared to most western standard textbooks.

## REFERENCES

1. Neiger R, Sonek J, Croom C, Ventolini G. Pregnancy-related changes in the size of uterine leiomyomas. *J Reprod Med* 2006; 51(9):671-4.
2. Cramer SF, Patel A. The frequency of uterine leiomyoma. *Am J Clin Pathol* 1990; 94:435.
3. Marshall LM, Barbieri RL, et al. Variation in the incidence of uterine leiomyoma among premenopausal women by age and race. *Obstet Gynecol* 1997; 90: 967.
4. Jeffcoate T. *Principles of Gynaecology*. London: Butterworth 1975.
5. Rubo R, Menstrual bleeding in leiomyoma. *Obstet Gynecol* 1985;43:170.
6. Madhu U, et al. A study of menstrual disturbance in cases of fibroid uterus. *J Obstet Gynecol, India* 1988; 6:710.
7. Stovall, et al. Iron versus placebo in the anaemic patient before surgery for leiomyomas: a randomized control trial. *Obstet Gynecol* 1995; 86:65.

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