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# **Original Research Article**

# A study of menstrual disturbance in cases of fibroid uterus

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# ABSTRACT

**Background:** Leiomyoma's also called fibroids due to their abundant fibroit tissue have a 70-80% cumulative incidence in childbearing years. Fibroids are the most common occurring benign tumors. Fibroids represent a tremendous public health burden on women and economic cost on society.

**Methods:** It is prospective study done over a period of one year, 50 cases presenting to the obstetrics and gynecology department. Women included were in their reproductive age between 30-55 yrs. of age and had experienced menstrual bleeding complaints.

**Results:** The prevalence of uterine fibroids ranged from 46% in age group 41-45yrs, 24% in 46-50yrs, and 11% in 36-40yrs. Women with uterine fibroids complained of menorrhagia in 78%, dysmenorrhea in 30%, metrorrhagia in 10%, polymenorrhea 22%, pain in abdomen 22%, urinary problem 8%, SCOPV 6%, primary infertile 4%, leucorrhea 12% and lump in abdomen 4%.

**Conclusions:** Uterine fibroid is a common problem in women of reproductive age causing various bleeding and pain symptoms that can have negative impact on various aspects of women's life.

Keywords: Dysmenorrhea, Fibriods, Leiomyomas, Menorrhagia, Uterus

## **INTRODUCTION**

Leiomyomas also called fibroids due to their abundant fibrotic tissue, have a 70-80% cumulative incidence in childbearing years.<sup>1</sup> Fibroids are the most common occurring benign tumors. Fibroids represent a tremendous public health burden on women and economic cost on society.<sup>2</sup>

There is a definite correlation between estrogen and fibroids noting their absence before puberty and their regression after menopause and enlargement with years of greatest ovarian activity.<sup>3</sup> There is a definite close association between hyperestrogenism and fibromyoma.<sup>4</sup> There are shared predisposing factors underlying both uterine fibroids and adverse metabolic and cardiac

disease risk or that metabolic factors have a role in biological mechanism underlying fibroid development.<sup>5</sup>

Most fibroids are asymptomatic and require no treatment. When menstrual disturbance leads to anemia, pain from degeneration, pressure symptoms developing from large size and when size increases rapidly, either medical or surgical treatment is required. The association between uterine bleeding symptom's and myoma is long know, the pathomechanism is not understood yet possible causes are venous ectasia resulting from mechanical compression of veins by myomas.<sup>6</sup> These symptoms are sever enough in approximately 25% of women with fibroids to require treatment.<sup>7</sup> Therefore, the study highlights the importance of studying the various menstrual abnormalities in detail associated with fibroids.

Objectives of present study were to investigate the various menstrual disturbances, and other clinical features in cases of fibroid uterus.

# **METHODS**

The present study was done in the department of obstetrics and gynecology teaching institute. It was a prospective observational type of study over a period of one year and 50 cases were studied. All the patients included in the study were in their reproductive age between 30-55 years inclusive with symptomatic myomas. Exclusion criteria were bleeding due to DUB, and other causes. A detailed history and clinical examination was done. All the blood investigations with ultrasound transvaginal and trans abdominal was done to confirm the diagnosis. Women were asked symptoms of heavy bleeding (gushing -type bleeding, long menses, pad/tampon use), number of hospital visits, diagnosed conditions, any treatment received prior and impact on life. Data was collected according to the questionnaire which was prepared in local language and proforma, patients name, age, geographic region, occupation, complaints of bleeding PV onset, progression, duration and other associated complaints like pain in abdomen, intermittent spotting, pv discharge, bowel and bladder symtoms, and complaints of primary /secondary infertility was asked. A detail general and systemic examination was done to look for pallor, per abdomen for mass, per speculum for fibroid polyps n bleeding, pelvic examination for uterine size, shape, consistency and bilateral fornix were examined.

# RESULTS

In the present study we have taken 50 cases from age group 30-55 years maximum number of cases were in the age group of 41-45 years of age with 23(46%) cases. 46-50yrs was 12 (24%), 36-40yrs was 11 (22%), 51-55yrs was 3(6%) and 30-35yrs was 1(2%) (Figure 1).

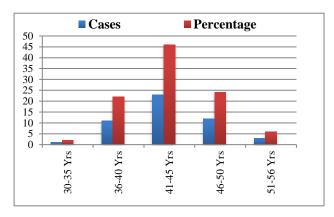
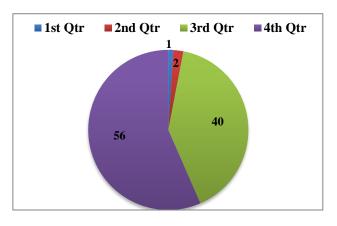
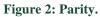


Figure 1: Age incidence.

Parity wise this study shows the incidence of fibroids was more in multiparous women with 20 (40%) cases of parity 2 and 28 (56%) cases of parity 3. The incidence was less in nulligravida and single parity with one (2%) case in each (Figure 2).





#### Symptomatology

It was observed that nearer the fibroid to the endometrial cavity it causes increased symptoms. In our study majority of the patients had menstrual complains, and had more than one complaints. Maximum number of cases presented with menorrhagia 34 (78%) cases. Dysmenorrhea was seen in 15 (30%) cases. Metrorrhagia 05 (10%), polymenorrhea 11 (22%), Postmenopausal bleeding 03 (06%), Lump in abdomen 02 (4%). Pain in abdomen 11(22%), Dysuria 02 (4%), Frequency of micturition03 (06%), SCOPV 03 (06%), Constipation 01 (02%), Primary Infertility 02 (04%), Leucorrhea 06 (12%), Backache 02 (04%). There is a tendency for women with myomas to have delayed menopause. In our studies 12 (24%) cases were found still menstruating above 45 years of age (Table 1).

#### Table 1: Symptomatology.

Symptoms	No. of cases	Percentage
Menorrhagia	34	78
Metrorrhagia	05	10
Polymenorrhea	11	22
Dysmenorrhea	15	30
Postmenopausal bleeding	03	6
Lump in abdomen	02	4
Pain in abdomen	11	22
Dysuria	02	4
Frequency of micturition	03	6
SCOPV	03	6
Constipation	01	2
Primary Infertility	02	4
Leucorrhea	06	12
Backache	02	4

Investigations in present study maximum number of cases were with uterine size less than 12 weeks that is 36 (72%), with 12-24 weeks uterine size were 13 (26%).

Only one cases was with uterine size more than 24 weeks (Table 2).

# Table 2: Size of uterus.

Size of uterus	No. of cases	Percentage
Less than 12 wks.	36	72
<12<24	13	26
<24 weeks	1	2

## DISCUSSION

The study of fibroids was carried on fifty patients attending our teaching hospital. Fibroids are the most common occurring benign tumors found in the reproductive age group. 20% of women over 30 years harbor fibroids.8 There is a definite close association between hyperestrogenism and fibromyoma.<sup>4</sup> The incidence of fibroids was not the monopoly of nulliparous or sterile but were high in parous women.9 The growth of the tumor is affected by progesterone also.<sup>10</sup> The risk factor reduced with increasing duration of use of oral contraceptives, 31% when used for 10 years.<sup>11</sup> The majority of fibroids are asymptomatic. Women with uterine fibroids often experience troubling symptoms and significant discomfort, which diminish their sex, lives and reduce their quality of life.<sup>12</sup> Diagnosis made by history symptoms and sign and ultrasonography. Mapping of uterine myoma is more precise with transvaginal USG than hysteroscopy.<sup>13</sup> Uterine leiomyoma are the single most common indication for hysterectomy.<sup>14</sup> Surgery has been the main stay of treatment and various minimally invasive procedures have been developed in addition to hysterectomy and myomectomy. Formation of new myomas after the conservative therapy remains the main problem. Although medications that manipulate concentration of steroids hormones are effective, their side effects limit their long-term use.  $^{\rm 14}$ 

Author	Age	Percentage
Allahbadia	31-40	74
Bhat	30-40	51
Present study	41-45	46

Comparison of age incidence with Allahbadia study was 31-40 yrs. 74%.<sup>15</sup> Bhat was 30-40yrs 51%.<sup>16</sup> Present study was 41-45yrs 46% (Table 3). The age incidence of fibroid uterus in our study was seen to be higher than other authors.

Comparison of parity wise distribution with other authors Allahbadia Nulliparity 50%, multiparty 50%.<sup>15</sup> Bhat nulliparity were 5% and multiparity were 95%.<sup>16</sup> Present strudy 4% were nulliparity and multiparity were 96% (Table 4). The incidence of fibroids was found higher in multiparous patients, which are comparable with other studies.

#### Table 4: Comparison of parity wise distribution

Author	Nulliparity	Multiparity
Allahbadia	50%	50%
Bhat	5%	95%
Present study	4%	96%

Comparison of clinical features, highest number of patients presented with menorrhagia, which is comparable with other studies of Allahbadia, Chhabra Zimmermann.<sup>16-18</sup> All other symptoms had similar incidence. There were no cases of amenorrhea and scanty menses in present study (Table 5).

Author	menorrhagia	Metrorrhagia	Poly Menorrhagia	Dys menorrhagia	Mass abdomen	Pain in abd	Primary infertility	Urinary problems
Allahbadia	34	6	12	18	20	24	28	10
Chhabra	35	42	20		2	26		
Zimmerman	59.8	33.3	28.4	59.7		16		32.6
Present study	78	10	22	30	4	22	4	6

# Table 5: Comparison of clinical features.

# CONCLUSION

A study of 50 cases of fibroids was made over a period of one year. Fibroids are the commonest tumor of the reproductive age. Uterine fibroids are not monopoly of null parity or sterile women. The incidence of fibroids in parous women is quite high contrary to the common belief that these tumors are common with low parity or in sterile women. At times fibroids are asymptomatic and do not require treatment, contrast to this sometimes sever symptoms like menorrhagia, dysmenorrhea and pressure symptoms occur which makes treatment necessary which can have a negative impact on different aspects of women's life. Funding: No funding sources Conflict of interest: None declared Ethical approval: The study was approved by the Institutional Ethics Committee

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