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Study of Women Presenting with Leiomyoma in Terms of Symptoms, Age of Presentation and Location

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Abstract

Aim and objective: To Categories women presenting with leiomyoma with respect to:

- Age
- Most common symptom
- Location of leiomyoma

Settings and Design: This was an observational study carried out in a tertiary health center for a period of 1 year from September 2019 to September 2020.

Materials and Methods: A retrospective observational study was conducted in 35 women having pain in abdomen, abnormal uterine bleeding, who were presented to the department of obstetric and gynecology, Bharati Vidyapeeth deemed university, Pune between sept 2019 and sept 2020.

All the patient presented with above mentioned symptoms were studied after obtaining consent from participant.

Ultrasound was done and location of leiomyoma was studied.

Fibroid were studied in terms of its, location and most common presenting symptoms and age of occurrence of symptoms.

Results: In our study, themost common age group of presentation was 36-40 years (reproductive age group.)

Most common type of fibroid was intramural (62.8 %)

Most common symptoms was menorrhagia (57.1%).

Most commonly associated with nulligravida (49.5%).

Keywords: Ultrasound; Clinical symptoms; Abnormal uterine bleeding.

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Introduction

Uterine fibroid is the most common benign monoclonal tumor of uterus originating from the smooth muscle of myometrium occurring most commonly during the middle and late reproductive age group.[1]

It contains large aggregation of extracellular matrix composed of collagen, elastin, fibronectin and proteoglycan.[1]

The estimated cumulative incidence of Leiomyoma by the age 50 was more than 80% for black women and nearly 70% for white women.[2]

Presenting symptoms depends most commonly upon the size and location of the fibroid.[2]

Patient may present with pain in abdomen, abnormal uterine bleeding, dysmenorrhea.[3,4,5] Sometime patients may present with urinary symptoms like urinary frequency or urgency.[5]

FIGO Classification Categorizes[5] leiomyoma as:

Submucosal, Intramural, Subserosal and transmural fibroids:

Type 0	Intracavitary
Type 1	Less than 50 % of fibroid diameter within the myometrium.
Type 2	50 % or more of the fibroid diameter within the myometrium.
Type 3	abut the endometrium without any intracavitary component
Type 4	Intramural and entirely within the myometrium, without extension to either the endometrial surface or to the serosa
Type 5	Subserosal at least 50 % intramural.
Type 6	Subserosal less than 50 % intramural.
Type 7	Subserosal attached to the serosa by a stalk
Type 8	No involvement of the myometrium; includes cervical lesions, those in the round or broad ligament without direct attachment to the uterus and "parasitic" fibroids.

The risk factors of leiomyoma includes sedentary life styles, diet rich in beef, red meat and lack of green leafy vegetables. First degree relatives of patients with fibroid are also at the increased risk of developing fibroid.[6]

Ultrasound is the most readily available[7] and least costly imaging technique to differentiate fibroids from other pelvic pathology.

Fibroids can be managed medically or surgically.

Surgical option include myomectomy, laparoscopicmyomectomy, laparoscopic radio frequency ablation, hysteroscopicmyomectomy, endometrial ablation and abdominal hysterectomy.[8,9,10]

Materials and Methods

A Retrospectiveobservational study was carried out in 35 women (reproductive and perimenopausal age group) visiting gynecological OPD in Bharati Hospital, with leiomyoma with symptoms.

The Data was collected from September 2019 to September 2020 for a period of 1 year.

Informed Consent was obtained from each patient.

All the patients with above mentioned symptoms under went ultrasound and results were obtained.

Inclusion criteria

Women of reproductive and perimenopausal age group with leiomyoma with symptoms like pain in abdomen, menorrhagia.

Exclusion criteria:

Unmarried women with leiomyoma. Women with other comorbidities such as bleeding disorders, heart disease, renal disease. Women on concurrent anticoagulation therepy.

Result

Table 1: Most common age of presentation was 36-40 years (57.1%) as shown in Table 1.

Age (in years)	Total	Precentage
25-30	1	2%
31-35	14	40
36-40	20	57.1%
Total	**35**	–

Table 2: Most common fibroid was intramural as shown in Table 2 (62.8%).

Fibroid Type	Total	Precentage
Intramural	22	62.8%
Subserosal	9	25.71%
Submucosal	4	11.42%

Table 3: Most common presentation was menorrhagia (57.1%).

Symptoms	Total	Percentage
Memorrhagia	20	57.1%
Dysmenorrhoea	5	14.2%
Pain in abdomen	8	22.85%
Asymptomatic	2	5.71%

Table 4: The above table shows that presence of submucosal fibroid decreases the fertility rate to a significant level. The presence of intramural fibroid does not affect the fertility rate significantly. Also, presence of subserosal fibroid has no effect of fertility rate.

Types of Fibroid	Fertility
Submucosal	12%
Intramural	40%
Subserosal	80%

Table 5: Out of 35 women, 12 patients were managed medically while 23 patients underwent surgery, either conservative (medical) or definitive. (Myomectomy or hysterectomy).

Number of Women	Mode to treatment	Precentage
12	Medical	34.2%
23	Surgical	65.5%

Discussion

Uterine fibroid is the most common benign tumor of the uterus accounting for approximately 60 %.[1]

It most commonly occurs at the reproductive age group as shown in our study, around 57.1% women were belonging to age group of 36-40 years.[1]

As stated in study by Wallach and Bukulmez, symptoms of fibroid depends upon the type of fibroid, most common being menorrhagia as depicted in our study. Around 57.1% women had menorrhagia as their presenting complaint.[4]

Other symptoms includes pain in abdomen, dysmenorrhea. About 5% of the fibroid remains asymptomatic and are always an incidental finding.[1]

Also the most common type of fibroid is intramural which is showed in our study (62.8%) which matches with the study done by Laughlin.[5]

Most of the fibroid remains asymptomatic and hence do not require any treatment. While symptomatic fibroid aremanaged either by medical method or surgical method.

Submucosal fibroid is the most common fibroid leading to infertility as shown in our study, leading to only 12% of fertility rate as compared to sub serosal and intramural which adds to significant value for fertility rate (80% and 40 respectively)[7]

In our study about 12(34.2%) patients were managed medically while 23(65.5%) patients were managed by surgical method.[7]

Conclusion

Uterine fibroid is the most common benign tumor of smooth muscle of uterus accounting for approximately 60%. Most common type being intramural and most common presenting symptoms is menorrhagia. Submucosal type affects the fertility the most.

Ultrasound is the most readily available diagnostic modality. Treatment options include conservative (Medically) or surgical.

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