e-ISSN: 0975-1556, p-ISSN:2820-2643
Available online on www.ijpcr.com
International Journal of Pharmaceutical and Clinical Research 2024; 16(4); 13-15

Original Research Article

Demographic Study of Leiomyoma Cases in Tertiary Care Center in Rajasthan

Nikky Punia[1], Harpreet Bajwa Sharma[2]

[1]Assistant Professor, Dept of Obs & Gyn, National Institute of Medical Sciences and Research, Jaipur.
[2]Assistant Professor, Dept of Obs & Gyn, National Institute of Medical Sciences and Research, Jaipur.

Received: 21-01-2024 / Revised: 26-02-2024 / Accepted: 29-03-2024
Corresponding Author: Harpreet Bajwa Sharma
Conflict of interest: Nil

Abstract:

Aim and Objective: To analyze the demographics of women presenting with leiomyoma with respect to: Age, symptoms, location etc.

Settings and Design: This was an observational study carried out in a tertiary health center for a period of 1 year from September 2022 to September 2023.

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 obstetrics and gynaecology, National Institute of Medical Sciences and Research, Jaipur between sept 2022 and sept 2023. 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 ofsymptoms.

Results: In our study, the most common age group of presentation was 36-40 years. 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.

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 African women and nearly 70% for Caucasian women. [2] Presenting symptoms depends most commonlyupon the size and location of the fibroid. 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 leiomyoma as:

Submucosal, Intramural, Subserosal and transmural fibroids:

Type 0 Intracavitary
Type 1 Less than 50 % of fibroid diameter within themyometrium.
Type 2 50 % or more of the fibroid diameter within themyometrium.
Type 3 about the endometrium without any intracavitarycomponent
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 uterusand "parasitic" fibroids.

Materials and Methods

The Retrospective observational study was carried out in 35 women (reproductive and perimenopausal age group) visiting gynecological OPD in NIMS Hospital, Jaipur ,with leiomyoma symptoms. The Data was collected from September 2022 to September 2023 for a period of 1 year. Informed Consent was obtained from each patient. All the patients with above mentioned symptoms underwent 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 therapy.

Result

Among the selected sample population, the most common age of presentation was 36-40 years (57.1%). The risk factors of leiomyoma includes sedentary life styles, diet rich in red meat and lack of green leafy vegetables. First degree relatives of patients with fibroids also have a risk of developing Fibroids as per studies.[6]

Table 1: Most common fibroid was intramural as shown in Table 1 (62.8%).

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

Ultrasound is the most readily available and least costly imaging technique to differentiate fibroids from other pelvic pathology. [7]
Fibroids can be managed medically or surgically. Surgical option include myomectomy, laparoscopic myomectomy, laparoscopic radio frequency ablation, hysteroscopic myomectomy, endometrial ablation and abdominal hysterectomy. [8,9,10]

Table 2: 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 3: Fertility and Fibroid

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

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

Discussion

Uterine fibroid is the most common benign tumor of the uterus accounting for approximately 60 % of the total cases. [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 are managed 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.

Conclusion

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

References

1. Islam MS, Ciavattini A, Petraglia F, Castellucci M, Ciarmela P. Extracellular matrix in uterine leiomyoma pathogenesis: a potential target for future therapeutics. Human reproduction update. 2018 Jan 1;24(1):59-85.
2. Baird DD, Dunson DB, Hill MC, Cousins D, Schectman JM. High cumulative incidence of uterine leiomyoma in black and white women: ultrasound evidence. American journal of obstetrics and gynecology. 2003

Jan 1;188(1):100-7.
3. Wallach EE, Vlahos NF. Uterine myomas: an overview of development, clinical features, and management. Obstet Gynecol. 2004; 104(2):393– 406.
4. Bukulmez O, Doody KJ. Clinical features of myomas. Obstet Gynecol Clin North Am. 2006;33(1):69–84.
5. Laughlin Tommaso SK, Hesley GK, Hopkins MR, Brandt KR, Zhu Y, Stewart EA. Clinical limitations of the International Federation of Gynecology and Obstetrics (FIGO) classification of uterine fibroids. International Journal of Gynecology& Obstetrics. 2017 Nov;139(2):143- 8.
6. Pavone D, Clemenza S, Sorbi F, Fambrini M, Petraglia F. Epidemiology and risk factors of uterine fibroids. Best Practice & Research Clinical Obstetrics & Gynaecology. 2018 Jan 1; 46:3-11.
7. Evans P, Brunsell S. Uterine fibroid tumors: diagnosis and treatment. American family physician. 2007 May 15;75(10):1503-8.
8. Vilos GA, Allaire C, Laberge PY, et al. The management of uterine leiomyomas. J ObstetGynaecol Can. 2015;37(2):157–181.
9. Carranza-Mamane B, Havelock J, Hemmings R, et al. The management of uterine fibroids in women with otherwise unexplained infertility. J Obstet Gynaecol Can. 2015; 37(3):277–288.
10. Aarts JW, Nieboer TE, Johnson N, et al. Surgical approach to hysterectomy for benign gynaecological disease. Cochrane Database Syst Rev. 2015;(8):CD003677.