Original Article

Clinical Pattern and Management of Patients Presented with Uterine Fibroids

Fozia Shaikh[1], Fehmida Parveen Memon[2], Rasheeda Hingoro[3], Keenjher Rani,[4]

Usama Feroz Daudpota[5]

[1.] Lecturer, Dept of Biochemistry department of LUMHS, [2]Assistant Professor, Dept of Obs & Gynae, LUMHS
[3.] Medical Officer, Agha Khan Hospital Hyderabad, [4]Assistant Professor, Physiology department of LUMHS
[5]Liaquat National Hospital and Medical College Karachi

Correspondence: *Dr. Fozia Shaikh*
Lecturer, Biochemistry department of LUMHS
Email: foziaferoz1964@yahoo.com

Abstract

Objective: To determine the clinical presentation and management in patients with uterine fibroids.

Methodology: This prospective observational study was conducted in gynae department of LUMHS from 2016 to 2017. All patients of 18 to 60 years of age and having a diagnosis of uterine fibroids were included in the study after taking verbal informed consent. All the patients were evaluated for clinical presentation and management. All the information was recorded on self-designed proforma. Data was analyzed by SPSS version 20.

Results: In this study, the majority of patients i.e. 60% with fibroid belonged to age group of > 40 years followed by 30% of patients found in the age group of 30-40years. The most common presenting complaint was menorrhagia, which was observed in 60% of patients having submucosal fibroid followed by a feeling of abdominal mass in 30% of patients. Out of all 20% of patients got conservative treatment and 30% underwent myomectomy while 50% underwent a hysterectomy.

Conclusion: In the observation of this study most common clinical feature was menorrhagia and the majority underwent a hysterectomy, which remains the only proven permanent solution for uterine fibroids.

Keywords: Fibroid, Menorrhagia, Management.

Cite this article as: Shaikh F, Memon F P, Hingoro R, Rani K, Daudpota U F. Clinical Pattern and Management of Patients Presented With Uterine Fibroids.J Soc Obstet Gynaecol Pak.2020; Vol 10(3):190-194

Introduction

Uterine fibroids (UFs) are still a major health concern for numerous females, with a significant effect on the colour of females because of a combination of environmental and genetic factors. Based on population, the incidence of UFs has been reported to be about 70%. Pelvic pain, severe uterine bleeding, voiding and gastrointestinal problems, and impaired fertility, are the clinical symptoms associated with UF. Uterine fibroids, commonly called Leiomyoma, are by far the most prevalent noncancerous neoplasm within the female reproductive tract, and they arise from the smooth muscles of the myometrium.[1,2] The source of fibroids is unclear, however progesterone and estrogen, which promote tumour development, have been suggested to be accuse.[3,4] Diet also has been linked to a likelihood of fibroids and increased consumption of meat being linked to be a greater risk, whereas a diet rich in green vegetables has been found to be protective.[5] Infertility and nulliparity have long been linked to uterine fibroids, and rising parity lowers the fibroids risk by up to 5-fold.[5,6] Hormones are the most significant factor that are considered to have a causative association with fibroids. The non-existence of leiomyoma before puberty, its development throughout reproductive years, as well as

Authorship Contribution: [1,2]Wrtite the first daft of manuscript and interpretation of data, [3-5]drafting and revision of manuscript and data analysis

Funding Source: none
Conflict of Interest: none

Received: May 28, 2020
Accepted: Nov 02, 2020

its relapse after menopause all refer to some hormonal effect. Estrogens have long been thought to be the primary promoters of fibroid development, but new research shows that progesterone may also play a role, especially in its potential to trigger transforming growth factor (TGF) -beta, which appears to regulate cell formation and propagation. TGF- concentrations in the myometrium were found to be high, especially in the luteal phase during the cycle.[5] Fibroids are uncommon until menarche and disappear following menopause.[7] They can be single/multiple, and they have a detrimental effect on the reproductive tract. They can cause severe morbidity in females, as well as a decline in their quality of life.[7] Based on anatomical position, uterine myomas can be divided into three categories: Intramural/Interstitial fibroids, found inside uterine wall; Subserous fibroids, found in the uterine serosal surface (sometimes, they develop stalk or even fully dominate the cavity of uterus); Submucous fibroids, found underneath the endometrium (infrequently, they develop stalk or even fully dominate the cavity of uterus). The present study aimed to observe the clinical presentation and treatment of fibroids patients.

Methodology

This prospective study was conducted in gynae department of LUMHS over one year from 2016 up to 2017. All patients from 18 to 60 years were included in this study after taking verbal informed consent. Patients having coagulation failure and comorbidities were excluded from this study. Detail medical history was taken from the study participants including age, parity, abortion, regularity of the cycle, estimated amount of blood loss, prolonged duration of blood loss, bleeding between period, and type of treatments. All the information was recorded on self-designed proforma. Data was analyzed by SPSS version 20. Percentages were calculated to show the results.

Results

A total of 100 patients were included in this study. In this study, the majority of patients i.e. 60(60%) with fibroid belonged to the age group of > 40 years followed by 30(30%) patients found in age group of 30-40years. (Table I)

In the present study, the most common presenting complaint was menorrhagia, which was observed in 60(60.0%) patients having submucosal fibroid followed by feeling of abdominal mass in 30 (30.0%), subfertility 10 (10.0%), pain in 20(20.0%) and degenerative changes in 5(5.0%). (Table II)

Table I: Age group distribution (n=100)

Age groups	Statistics
<30 year	10(10%)
30-40 year	30(30%)
>40 year	60(60%)
Marital status	
Married	80(80%)
Unmarried	20(20%)

Table II: Distribution of cases according to clinical presentation (n=100)

Clinical presentation	Statistics
Asymptomatic	10(10%)
Feeling of mass	30(30%)
Menorrhagia	60(60%)
Pain	20(20%)
Subfertility	10(10%)
Degenerative changes	5(5%)
Postmenopausal bleeding	2(2%)

In this study, the most common type of fibroid was intramural which was observed in 45(45%) patients, followed by submucosal 35(35%) and subserosal in 20(20%). (Table III)

Table III: Distribution of cases according to type of fibroid (n=100)

Fibroid type	Statistics
Intra mural fibroid	45(45%)
Submucosal fibroid	35(35%)
Subserosal fibroid	20(20%)
Cervical fibroid	10(10%)

In this study, 20(20%) patients got conservative treatment while 30(30%) underwent myomectomy while 50(50%) had a hysterectomy. (Table IV)

Table IV: Distribution of cases according to Management of fibroid (n=100)

Treatment	Statistics
Conservative	20(20%)
Myomectomy	30(30%)
Hysterectomy	50(50%)

Discussion

In this study, the majority of patients with fibroid belonged to age of >40 years. These findings were similar to the study of Lahori M et al[8] as patients' age

range was 18-62 years and most patients were seen between the age of 41-50 years. On the other hands, Raza AM et al[9] also found similar findings as most of the study participants 46.84% were found with the age group of 41-50 years. The women affected with fibroids in our study were predominantly married. However, this situation was not found to be significant. This was in accordance to another study by Olantiwo et al[10] also found no association between the incidence of fibroids and the marital status of the patient. However, a correlation of the marital status and the incidence of fibroids were observed in a study by Choi et al.[11] However, the incidence of fibroids was found to be higher among the single women in a study by Novak etal.[12] Lahori M et al[13] reported that the age range of leiomyoma patients was18-62 years and the majority of the study subjects 46.84% were presented with 41 to 50 years of age group.

Uterine leiomyomas that are clinically manifested affect around 20-30% of females aged above 35 years. Srilatha J et al[14] documented in their study that most of the fibroids subjects were aged between 40 and 59 years and married were 59.8%, while either divorced or unmarried or widowed subjects were 40.2%. Since uterine fibroids remain highly dependent upon estrogen, their typical age ranges between menarche and menopause. Fibroids are commonly linked to a higher risk of prolonged or severe menstruation.[5] Increased surface area of endometrium; congestion and distortion of underlying vessels, abnormal development of endometrium, increased blood flow towards uterus, and poor contractility of uterus have all been proposed as causes of fibroids.[5]

In the present study, the most common presenting complaint was menorrhagia, which was observed in 60 % of patients having submucosal fibroid followed by feeling of abdominal mass in 30% cases, subfertility 10%, pain was in 20% and degenerative changes was in 5% cases. Similarly, 68% menorrhagia was also reported by Sarfraz et al.[15] However Dayal S et al[16] reported that abdominal pain, menorrhagia, and abdominal mass were the commonest clinical symptoms correlated to intramural leiomyoma. Submucosal leiomyoma was associated with menorrhagia. Secondary variations including mucoid, hyaline, fatty and cystic, degeneration have also been observed most frequently in intramural leiomyoma.

Ezeama CO et al[17] stated that out of 103 study subjects, in 67 (66.9%) of cases, mass in lower abdomen was the most frequent mode of presentation, while recurrent abortion (1%) being the least common (1/103). All of the 103 study subjects underwent surgery and myomectomy was the most frequent technique used in 93(90.3%) cases. From southwestern Nigerian city Ilesha, Oguniyi, and Fasuba also documented that abdominal mass was the most frequent symptom,[18] which is contradictory to the findings of Adinma, who reported that the most frequent presenting symptom was menorrhagia.[19]

In this study, most frequent type of fibroid was intramural which was observed in 45% of patients, followed by submucosal in 35% of cases and subserosal was seen in 20% of the cases. According to Padubidri and Daftary et al,[20] most frequent fibroids are intramural (75%), followed by submucosal fibroids (15%), subserosal fibroids (10%), and cervical fibroids (1%–4%). Jung et al[21] documented that 55.7% of cases were found to have intramural fibroids, 16.3% of cases were subserous fibroids, 15.6% were cervical fibroids, and 12.4% of cases were submucosal fibroids. However, Abraham and Saldanha observed intramural fibroids in 61.5% cases, subserosal leiomyomas in 9% cases and submucosal leiomyomas in 5% cases.[22] Akinyemi et al[23] also showed similar trends as in their study intramural fibroids were 70%, subserous fibroids were 20%, and submucous fibroids were 10%. These findings indicate that before migrate inward or outward all fibroids start intramurally, as per circumstances.

Based on the number, location, size, and symptomatology, numerous treatment alternatives are available. When the fibroids have triggered substantial symptoms Surgical and medical treatment options are unlike conservative therapy, in which the fibroids trigger no evident symptoms and basic monitoring is enacted. Because of the substantial risks associated with long-term care, medical intervention is currently used only for brief treatment; additionally, there is insufficient data about the risks and benefits of therapy over a long period of time with modern medical interventions. This is a non-curative treatment, however, it may be applied to help perimenopausal females' transition to menopause or in females who need to delay before surgical procedure, such as if the patient is unable to undergo a surgical procedure or if the fibroids are excessively large and prior to surgery shrinkage is needed. In this study, 20(20%) patients got conservative treatment while 30(30%) underwent myomectomy while 50(50%) had hysterectomy. In study conducted by Borah BJ et al[24] reported that prior

to seek leiomyomas treatment an average delay by females was 3.6 years, and for diagnosis, 41% of females had gone more than two. Nearly 28% of respondents who were in employment reported leaves from work because of leiomyoma symptoms, and around 24% of respondents thought that the symptoms hindered them from fulfilling their maximum capabilities in their professions. Females expressed a preference for interventions that do not need invasive surgical procedures (79%), that allow uterus preservation (51%) and fertility (43% of females aged over 40 years). Based on the location, size, and type, fibroids may be removed surgically (myomectomy) through hysteroscopically, laparoscopically, or laparotomy in females who choose to preserve their fertility. Myomectomy, on the other hand, is a surgery that carries risks and can lead to severe complications.

Okezie O et al[25] stated that the major clinical features found among their study subjects were pain in the lower abdomen, menorrhagia, and related infertility; medical management was not applied, however, surgical management included myomectomy using laparotomy in 60% of cases; abdominal total hysterectomy in 24.7% of cases; bilateral salpingo-oophorectomy and abdominal total hysterectomy in 12.1% of cases, and polypectomy in 3.2% of cases. Moreover, no endoscopic surgical procedure was available.

Conclusion

In the observation of this study most common clinical feature was menorrhagia and the majority of the patients underwent hysterectomy, which remains the only proven permanent solution for uterine fibroids. Early diagnosis and management can prevent the adverse outcome related to uterine fibroid.

Disclosure: The first author was ex resident of Obs and Gynae Dept, LUMHS

References

1. Parker WH. Etiology, symptomatology, and diagnosis of uterine myomas. Fertil Steril. 2007;87(4):725-36.
2. Kempson RL, Hendrickson MR. Smooth muscle, endometrial stromal, and mixed Müllerian tumors of the uterus. Mod Pathol. 2000;13(3):328-342.
3. Rein MS, Barbieri RL, Friedman AJ. Progesterone: a critical role in the pathogenesis of uterine myomas. Am J Obstet Gynecol. 1995;172(1 Pt 1):14-18.
4. Andersen J. Growth factors and cytokines in uterine leiomyomas. Semin Reprod Endocrinol. 1996;14(3):269-82.
5. Ezeama CO, Ikechebelu JI, Obiechina NJ, Ezeama NN. Clinical Presentation of Uterine Fibroids in Nnewi, Nigeria: A 5. year Review. Annals of medical and health sciences research. 2012;2(2):114-8.
6. Payson M, Leppert P, Segar J. Epidemiology of myomas. *Obstet Gynecol Clin North Am.* 2006;33:1–11
7. Juvvadi S, Verabelly M. Prevalence of fibroids: a study in semi urban area in Telangana India. International journal of Reproduction, Contraception, Obstetrics and Gynaecology. 2017;6(12):5247-50.
8. Lahori M, Malhotra AS, Sakul, Khajuria A, Goswami KC. Clinicopathological spectrum of uterine leiomyomas in a state of Northern India: a hospital-based study. Int J Reprod Contracept Obstet Gynecol. 2016;5:2295-9.
9. Raza AM, Tazri SA, Ahmed M, Nahar S, Afroz D, Barua D. A Study on Uterine Leiomyoma with Clinicopathological Spectrum. Journal of Histopathology and Cytopathology. 2018 ;2(1):41-6.
10. Olatinwo AW, Ofiong R. An Analysis of Surgically Treated Cases of Uterine Fibroids at the University of Ilorin Teaching Hospital, Ilorin, Nigeria. Nigerian J Surg Res. 2000;2(1):6-11.
11. Choi JH, Kim JK. Influences of health-related factors on uterine myoma. J Korea Contents Assoc. 2010;10(1):325-33.
12. Novak ER WJ. Myoma and other benign tumors of the uterus. Gynecologic and Obstetric Pathology. 8 th ed ed. Philadelphia, USA: W.B. Saunders; 1979:260-78. 13.Lahori M, Malhotra AS, Sakul KA, Goswami K. Clinicopathological spectrum of uterine leiomyomas in a state of Northern India: a hospital based study. International Journal of Reproduction, Contraception, Obstetrics and Gynecology. 2016;5(7):2296.
14. Srilatha J, Malathi V. Prevalence of fibroids: a study in a semiurban area in Telangana, India. Int J Reprod Contracept Obstet Gynecol.2017;6:5247-50
15. Sarfraz R, Sarfraz MA, Kamal F, Afsar A. Pattern ofbenign morphological myometrial lesions in totalabdominal hysterectomy specimens. Biomedica.2010;26:140-3.
16. Dayal S, Kumar A, Verma A. Clinicopathologic correlation of leiomyoma with clinical findings and secondary changes in a rural population of north India. American journal of clinical pathology. 2014;141(2):275-9.
17. Ezeama CO, Ikechebelu JI, Obiechina NJ, Ezeama NN. Clinical Presentation of Uterine Fibroids in Nnewi, Nigeria: A 5. year Review. Annals of medical and health sciences research. 2012;2(2):114-8.
18. Medical management of fibroids. Sankaran S, Manyonda IT Best Pract Res Clin Obstet Gynaecol. 2008; 22(4):655-76. [PubMed] [Ref list]
19. Adinma JIB. Uterine fibroid and fertility in Enugu. Nigeria medical journal. 1994;5:3–5.

20. Padubidri VG Daftary SN. Fibromyomas of the uterus. In: Howkins & Bourne Shaw's Textbook of Gynaecology. 12th ed.New Delhi, India: Churchill Livingstone; 1999:275–285.
21. Jung JK, Koi MS, Jung BW, Lee HH, Choi HJ, Shin SK. A clinical analysis of uterine myoma. Korean J Obstet Gynecol. 1998;41(1):210-9
22. Abraham J, Saldanha P. Morphological variants and secondary changes in uterine leiomyomas. Is it important to recognize them? Int J of Biomed Reseach. 2013;4(12):254-64.
23. Uterine fibroid: a review. Akinyemi BO, Adewoye BR, Fakoya TA Niger J Med. 2004; 13(4):318-29.
24. Borah BJ, Nicholson WK, Bradley L, Stewart EA. The impact of uterine leiomyomas: a national survey of affected women. American journal of obstetrics and gynecology. 2013;209(4):319-e1.
25. Okezie O, Ezegwui HU. Management of uterine fibroids in Enugu, Nigeria. Journal of obstetrics and gynaecology. 2006 ;26(4):363-5.