Clinical Profile and Management of Various Types of Uterine Fibroids Among South Indian Women in The Reproductive Age Group. A Cross-Sectional Study.

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Abstract:
Uterine fibroids are the most common benign uterine tumours, with an estimated incidence of 20%–40% in women during their reproductive years and are associated with a morbidity of 40%. These patients usually present with menorrhagia, pain and pressure symptoms caused by distortion of the myometrial cavity.
This prospective cross-sectional study on symptomatic women diagnosed with uterine fibroids and admitted into the hospital aims to find the clinical presentation, associated sociodemographic factors and management of uterine fibroids by interviewing them through a pre-designed questionnaire.
The study revealed a preponderance of married, multiparous women in their premenopausal age, their average age being 39.7 years with a normal BMI (18.5-24.9). Few of the presenting symptoms were seen to be heavy menstrual bleeding 85.6%, dysmenorrhea 73% and passage of blood clots 59.5%, infertility 10.8% and abortions 15.3%. The treatment of most of these patients was total abdominal hysterectomy 85.58%, myomectomy 12.63% or oral mifepristone 22.52%. An association was found between the presence of multiple types of fibroids and its treatment through surgical intervention (p=0.029).
The data collected suggested a need to develop modalities for early detection and formulate guidelines for early medical intervention to avoid invasive procedures and improve the QOL.

Keywords: Uterine Fibroids; Uterine leiomyomas; Myomas; Menorrhagia; Heavy menstrual bleed; Dysmenorrhea; Hysterectomy; Myomectomy.

Subjects: Women's health, Gynaecology, Public health

Statements:

Ethical statement:
Data collection has been done after attaining permission from the Institutional Ethical Committee and the necessary hospital authorities to interview the participants, look at reports and access medical records. A written informed consent had been signed by all the participants of the study before proceeding with the study.

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Conflict of interest: None

What We Already Know

- Uterine fibroids are one of the most common findings seen in a gynaecology clinic which often goes unnoticed by both the patients and the physicians due to its vague presentation or asymptomatic nature.
- Hence leading it to be detected in later stages causing a rise in morbidity among women of reproductive age and a decline in their quality of life.

What This Article Adds

- It was observed that the most common presentation seen in women with uterine fibroids were irregular cycles, heavy menstrual bleeding, blood clots and dysmenorrhea and the most common type of uterine fibroids was seen to be of intramural type.
- A significant association was seen between the presence of multiple uterine fibroids and their treatment through surgical intervention such as hysterectomy and myomectomy.
- Health education of the general public about the disease and formulation of standard guidelines to screen and detect uterine fibroids would go a long way in early reporting of these cases hence reducing the morbidity of women in their reproductive ages and the rise in rates of hysterectomy done in them. Additionally, extensive research is required to develop new medical therapies as alternatives to invasive procedures.

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Introduction:

Uterine fibroids (also known as fibroids or myomas) are the most common form of benign uterine tumours and estimated to have an incidence of 20%–40% in women during their reproductive years. [1,2]

It is seen that in the USA, the prevalence of uterine fibroids was 60% at the age of 35, which increased to more than 80% by the age of 50 years among African American women. [3] Whereas the prevalence was seen to be 29.3% in Nigeria, 78% in Peshawar (Pakistan), 24% in urban Bombay and 37.65% in the Indian rural setup. Though benign, uterine fibroids are associated with a morbidity of 40% thus affecting the quality of life. [4,5,6]

Various evidence-based studies have stated that higher oestrogen and progestogen states of the body help proliferate the tumour growth, as the fibroids have been observed to rarely appear before menarche and regress after menopause. [7]

These uterine myomas are broadly classified into three categories according to their anatomical location namely; Submucous fibroids located below the endometrium while occasionally, they develop pedicles or completely occupy the uterine cavity, Interstitial / Intramural fibroids located within the uterine wall and Subserous fibroids located in the serosal surface of the uterus. [8]

Risk factors for developing these uterine fibroids were observed to be premenopausal age, early age at menarche, reduced parity, obesity, consumption of red meat, hypertension, diabetes mellitus, previous pelvic inflammatory disease and genetics. Few studies have also shown that elderly primi are at higher risk of uterine fibroids. [9]

Slow-growing, asymptomatic fibroids are seen more frequently in about 30% of multiparous women belonging to perimenopausal age most of which are intramural and are confined to the myometrium. [4,10]

Symptomatic fibroids are seen in the 35-55 years age group which present with menorrhagia, metrorrhagia, pain and multiple fibroids distorting the myometrial cavity. These women also presented with severe anaemia and pain from degenerative changes. [4] While those with severe dysmenorrhoeal and bleeding PV were seen to have co-existing adenomyosis. [5,11]

Fibroids often tend to increase in size as women grow older and cause pressure symptoms causing bowel and bladder dysfunction such as urinary urgency, increased frequency and incontinence. Abdominal distention or distortion and pelvic pressure on the ureters causing hydronephrosis are some of the other presentations. [12,13]

Some studies have also pointed towards fibroids affecting obstetric outcomes leading to infertility and recurrent miscarriages depending on their location and size, especially for submucous and intramural myomas that distort the uterine cavity [14,15]

In the majority of women, uterine fibroids are found incidentally on a routine gynaecological examination performed for nonspecific symptoms which is later confirmed by an ultrasound. [16]

Therapeutic options to treat these symptoms include medical therapy, surgical interventions and uterine artery embolization. Medical treatments used to manage bleeding symptoms are oral contraceptives or progesterone analogues. Other medical alternatives include the Levonorgestrel-releasing intrauterine system (LNG-IUS) and GnRH-agonists. According to the reproductive desire of the patient and the severity of symptoms, standard surgical procedures are advised which comprise of myomectomy, endometrial ablation or hysterectomy. [17,18]

The prevalence of fibroids in the local populations is largely unknown. Hence, to bridge this gap in the current literature, this study was done to observe the prevalence of uterine fibroids, analyse their risk factors, clinical presentation and follow its course of management.

Methodology:

A hospital-based cross-sectional study has been conducted in a tertiary government hospital, in Hyderabad, Telangana, having a speciality gynaecological wing from August to September 2021. All women in their reproductive age who have been diagnosed with uterine fibroids through an ultrasound and admitted into the hospital were included while pregnant, post-menopausal women and those who have not given consent were excluded from the study. A Semi-structured Questionnaire had been used as the study tool along with the medical records of participants including investigations such as Complete Blood Pictures and Ultrasound of the abdomen and pelvis.

A written informed consent had been signed by all the participants of the study based on the inclusion and exclusion criteria before proceeding with the study and those were interviewed through the semi-structured questionnaire which included their socio-demographic details, the risk factors they were exposed to, their symptoms, signs, the investigations they underwent, complications that occurred and their eventual course of management. By the end of the given 2 months study duration, 111 women were added to the study.

All the data collected through the questionnaire has been recorded and compiled in a Microsoft Excel sheet which have been analysed using descriptive statistical methods such as frequencies, and percentages and

expressed in the form of tables and bar graphs. Further analysis of data and formulation of associations have been done through the use of chi square tests.

Results:

According to the data collected and analyzed, the mean age of the participants was found to be 39.78 and the mean age at menarche was found to be 12.47. Majority of the participants were residents of urban areas constituting an 84.68% where as 15.3% were residents of rural areas.

Among the subjects, of 90% of participants were married while 6.3% were unmarried and 3.6% were a widow. Among the participants, 76.57% were multipara where as 23.4% were primi or nullipara. A majority of 58.55% were Muslims and the rest 41.4% were Hindus. Out of them, 94.59% reported to be consuming red meat on a regular basis. The BMI of all the participants was measured and 73.87% were within the normal range where as 26.1% were found to be overweight.

On checking the subjects for co-morbidities, it was found that 14.4% of the participants had Diabetes, 19.8% had hypertension and 25.2% had hypothyroidism for which they were on medications.

All the symptoms presented by the patients were documented and broadly categorised into bleeding, pain and pressure symptoms out of which, heavy menstrual bleeding was the most common, observed in 95 participants followed by dysmenorrhea in 81 patients and the least common presentation was infertility seen in only 12 patients. The most common bleeding symptoms presented which were irregular cycles (66.7%), heavy menstrual bleeding (85.6%), blood clots (59.5%), prolonged menstrual bleeding of ≥10days (38.7%) and frequent periods in <24days (16.2%). The least common presentation was found to be infrequent periods of >38days (11.7%).The pain symptoms were dysmenorrhea seen in 73% of patients and pelvic pain in 55.9% patients. Frequency of pressure symptoms included feeling of fullness in abdomen (19.8%), frequent urination (12.6%) and palpable abdominal-pelvic mass (33.3%) as the most common presentations. Other complaints are infertility among 10.8% and repeated abortions among 15.3% of the subjects.

The USG Abdomen and Pelvis of all the participants showed a total of 6 types of fibroid growth out of which 41 showed only one type whereas 71 of them showed presence of multiple types and number of fibroids. Among them, Intramural fibroid(n=90) was the commonest type.

Other types include submucous (n=23), subserous (n=22), intramural with subserosal extension (n=6), seedling fibroids with adenomyosis (n=10) and fibroids in other sites such as cervix or broad ligament (n=7).

The association between various sociodemographic factors of participants such as Urban/rural setup, Religion, regular consumption of red meat, BMI, marital status, parity and number of abortions to the presence of multiple number and types of uterine fibroids respectively were compared. No significance was observed.

Table 1: Table showing association between sociodemographic factors versus multiple number and types of Uterine Fibroids

Variable		Number of fibroids 1	≥2	p-value	Types of fibroids 1	≥2	p-value
Address	Rural	4(23.5%)	13(76.5%)	0.213	9(52.9%)	8(47.1%)	0.347
	Urban	37(39.4%)	57(60.6%)		61(64.9%)	33(35.1%)	
Religion	Hindu	21(45.7%)	25(54.3%)	0.109	33(71.7%)	13(28.3%)	0.111
	Muslim	20(30.8%)	45(69.2%)		37(56.9%)	28(43.1%)	
Regular consumption red meat	NO	2(33.3%)	4(66.7%)	-	3(50.0%)	3(50.0%)	0.668
	YES	39(37.1%)	66(62.9%)		67(63.8%)	38(36.2%)	
BMI	Normal	31(37.8%)	51(62.2%)	0.750	55(67.1%)	27(32.9%)	0.141
	Overweight	10(34.5%)	19(65.5%)		15(51.7%)	14(48.3%)	
Marital status	Married	37(37.0%)	63(63.0%)	0.778	63(63.0%)	37(37.0%)	0.834
	Unmarried	2(28.6%)	5(71.4%)		4(57.1%)	3(42.9%)	
	Widow	2(50.0%)	2(50.0%)		3(75.0%)	1(25.0%)	
Parity	<3	32(39.0%)	50(61.0%)	0.444	56(68.3%)	26(31.7%)	0.055
	≥4	9(31.0%)	20(69.0%)		14(48.3%)	15(51.7%)	
No. of Abortions	1	40(38.5%)	64(61.5%)	0.257	67(64.4%)	37(35.6%)	0.420
	≥2	1(14.3%)	6(85.7%)		3(42.9%)	4(57.1%)	

The association between the co-morbidities seen in the participants such as diabetes mellitus type2, hypertension and hypothyroidism when compared to the presence of multiple number and types of uterine fibroids. No significance was observed.

Table 2: Table showing association between presenting symptoms versus number of fibroids and type of Uterine Fibroids.

Presenting symptom		Number of fibroids 1	≥2	p-value	Types of fibroids 1	≥2	p-value
Irregular menstrual cycles	YES	27(65.9%)	47(67.1%)	0.889	46(65.7%)	28(68.3%)	0.781
	NO	14(34.1%)	23(32.9%)		24(34.3%)	13(31.7%)	
HMB	YES	35(85.4%)	60(85.7%)	0.960	60(85.7%)	35(85.4%)	0.960
	NO	6(14.6%)	10(14.3%)		10(14.3%)	6(14.6%)	
Prolonged bleeding	YES	17(41.5%)	26(37.1%)	0.652	26(37.1%)	17(41.5%)	0.652
	NO	24(58.5%)	44(62.9%)		44(62.9%)	24(58.5%)	
Frequent cycles	YES	6(14.6%)	12(17.1%)	0.729	10(14.3%)	8(19.5%)	0.471
	NO	35(85.4%)	58(82.9%)		60(85.7%)	33(80.5%)	
Infrequent cycles	YES	7(17.1%)	6(8.6%)	0.225	8(11.4%)	5(12.2%)	-
	NO	34(82.9%)	64(91.4%)		62(88.6%)	36(87.8%)	
Blood clots	YES	24(58.5%)	42(60.0%)	0.880	41(58.6%)	25(61.0%)	0.803
	NO	17(41.5%)	28(40.0%)		29(41.4%)	16(39.0%)	
Dysmenorrhea	YES	28(68.3%)	53(75.7%)	0.395	48(68.6%)	33(80.5%)	0.172
	NO	13(31.7%)	17(24.3%)		22(31.4%)	8(19.5%)	
Pelvic pain	YES	21(51.2%)	41(58.6%)	0.452	37(52.9%)	25(61.0%)	0.406
	NO	20(48.8%)	29(41.4%)		33(47.1%)	16(39.0%)	
Fullness of abdomen	YES	7(17.1%)	15(21.4%)	0.579	13(18.6%)	9(22.0%)	0.666
	NO	34(82.9%)	55(78.6%)		57(81.4%)	32(78.0%)	
Frequent urination	YES	3(7.3%)	11(15.7%)	0.198	6(8.6%)	8(19.5%)	0.094
	NO	38(92.7%)	59(84.3%)		64(91.4%)	33(80.5%)	
Infertility	YES	3(7.3%)	9(12.9%)	0.530	7(10.0%)	5(12.2%)	0.758
	NO	38(92.7%)	61(87.1%)		63(90.0%)	36(87.8%)	

Through this table the association between the presence of multiple number and types of uterine fibroids with various presenting symptoms seen in the participants was compared and none of them were found to be significant.

The treatment modalities advised to the participants was noted and it was found that the majority of 85.58% (n=95) underwent surgery where as 22.52% (n=25) were given mifepristone. Additionally,17.11% (n=19) were given a supportive therapy of tranexamic acid and LNG-IUS. Additionally, 26.12% (n=29) were given blood transfusions in view of high-grade anemia.

Table 3: Table showing association between number and types of Uterine Fibroids against surgical and medical intervention

Variable		Surgical intervention No	Yes	p-value
Number of fibroids	1	7(17.1%)	34(82.9%)	0.542
	≥2	9(12.9%)	61(87.1%)	
Types of fibroids	1	14(20.0%)	56(80.0%)	0.029
	≥2	2(4.9%)	39(95.1%)	
Variable		**Mifepristone No**	**Yes**	**p-value**
Number of fibroids	1	33(80.5%)	8(19.5%)	0.561
	≥2	53(75.7%)	17(24.3%)	
Types of fibroids	1	54(77.1%)	16(22.9%)	0.912
	≥2	32(78.0%)	9(22.0%)	

This table shows a significant association (p value=0.029) between the presence of multiple types of uterine fibroids and their treatment through surgical intervention but no statistical significance was observed between the number of fibroids and surgical management. Similarly, no statistical significance was found between the number and types of uterine fibroids and medical management.

A total of 95 participants had a surgical course of management out of which, 37.89% underwent Total Abdominal Hysterectomy, 48.42% had undergone Total abdominal hysterectomy with Bilateral Salpingo-oopherectomy. About 12.63% had undergone myomectomy to preserve their fertility out of which 2.1% underwent a subsequent total abdominal hysterectomy whereas 1.05% underwent polypectomy.

Discussion

It is seen that the average age of the study population was 39.7years while in the study conducted by A.R. Samandi et al, the mean age was found to be 43.2 years. Both the studies showed a higher prevalence of uterine fibroids in the premenopausal age group. [19]

This study showed a greater percentage of women to be married 90.1% and multiparous 76.57% which was in concordance to the study by Juvvadi Srilatha et al with the percentage of married patients being 58.9% and multiparous being 65.5% whereas an inverse relation was hypothesized by Baird DD et al. [20,21] Moreover in this study, 14.4% of patients experienced spontaneous abortions which is more than the study by Juvvadi Srilatha et al showed 5.7%. [20]

While family history was found to be negligible in this study, other modifiable risk factors such as regular red meat intake 94.59%, higher BMI of >24.9 (26.1%), hypertension (25.2%) and diabetes mellitus type II (19.8%) were noted. Even though all these factors were listed in studies by Jacques Donnez et al and Aamir T Khan et al, it is said to be hypothetical and require further study to determine their exact role in the aetiology of fibroids. [9,17]

While the study by A.R.Samandi showed a correlation between BMI such that a high prevalence of myomas was seen in heavier women, no such correlation was found in this study. Moreover, in this study, the incidence of high BMI (>24.9) was found to be much lower as reported by Samadi et al and Parazzini et al [19,22] whereas the study by Shikora et al showed the opposite. [23]

On USG of abdomen and pelvis, this study reported intramural myomas (81.08%) as the most repetitive type which was in concordance to the study by M. Munusamy et al. [24] Other significant types seen were sub-serosal (19.81%), sub-mucosal (20.72%) and cervical myomas (6.3%).

The presenting symptoms in this study were divided into bleeding, pain and pressure symptoms and the quotidian presenting symptoms were found to be heavy menstrual bleeding (85.6%) and dysmenorrhea (73%). Among the bleeding symptoms, heavy menstrual bleeding, prolonged menstrual bleeding, irregular or frequent bleeding and passage of clots had a marked higher incidence in our study. These findings were consistent with previous studies done by Anne Zimmermann et al, Wegienka G et al and Clevenger-Hoeft M. et al. [25,26,27]. In such cases, the causes of AUB may include venous ectasias brought on by mechanical compression of veins by myomas, or altered function or expression of vasoactive growth factors produced by myomas. [28].

Gynaecologic pain symptoms such as dysmenorrhea and pelvic pain have also been reported in our study. All these symptoms were also reported in the study done by Anne Zimmermann et al wherein the results showed that such symptoms scored higher in those diagnosed with myomas than not. [25]

Pressure symptoms in this study such as frequent urination (12.6%) and feeling of fullness of abdomen (19.8%) were also noted. A study by Shaheen S et al observed that fibroids increase in size as women grow older and often present with pressure symptoms. [5]
The course of treatment seen in this study group was supportive and medical therapy to stop the symptoms and surgery was the end course of action in case of recurrences and failed medical therapy. Supportive treatment was given in the form of Tranexamic acid, LNG-IUS, Dilatation and Curettage, iron and folate tablets, Orofer and blood transfusions were given based on the severity of anaemia.
Mifepristone (25mg) was shown to reduce the size of myomas within 12 months in 98.14% cases in a study by Meeta Gupta et al. [29] The reduction in the size of fibroids with mifepristone was attributed to its direct effect in decreasing the number of progesterone receptors, thus leading to inhibition of steroid-dependent growth of myoma. [30,31] However no such association was observed in our study.
The surgery of choice was Total Abdominal Hysterectomy 75.67% with or without Salpingo-oophorectomy. Unmarried, nulliparous or patients that wanted to preserve their fertility opted for myomectomy 10.8%, dilation and curettage 15.3% or LNG-IUS 1.8% in case of failed medical therapy. Additionally, our study showed a significant association between the presence of multiple types of uterine fibroids and the use of surgical management. According to Jacques Donnez et al, myomectomy was to be done based on the size(3cm) and extension of myoma and hysterectomy has long been considered as standard surgical treatment for symptomatic intramural and submucous fibroids, particularly for women who have completed their family or those of premenopausal age (40–50 years) [9]

LIMITATIONS

Larger, multicentric studies and bigger sample size is required to generate information on which definitive conclusions can be made. Being a cross sectional study, some of its limitations include inability to measure the incidence, inability to determine causal relationships and risk of personal bias. In addition, extensive data on risk factors is required to bring out associations.

CONCLUSION

Although a benign tumour, uterine fibroids are a common concern for causing morbidity in women of reproductive age especially premenopausal women. These myomas are also seen to be associated with parity, obesity and menorrhagia. While many women are asymptomatic it was seen that among the symptomatic patients multiple bleeding and pain symptoms influence their social, psychological, sexual and work-life negatively.
Among the 111 patients admitted into the hospital on account of uterine fibroids, most were suffering from menorrhagia, anaemia, chronic abdominal pain and even infertility in some cases. This was due to ignorance of early symptoms, failed early detection and medical intervention leading to complications on long-standing undetected disease. As a result, most of the patients were administered blood transfusions and underwent total abdominal hysterectomy or post-myomectomy hysterectomy.
Through this study, it can be concluded that there is no awareness or knowledge among susceptible women regarding uterine fibroids, about its risk factors, presenting symptoms, signs and its burden causing a negative impact on the quality of life. Moreover, there are no clear guidelines for early screening and detection through the presenting signs, symptoms and are usually spotted incidentally through USG findings leading a majority of the patients to opt for invasive procedures such as myomectomy or hysterectomy as a last resort.
Hence more research must be done to determine the epidemiology, etiological clues in factors such as diet, stress, environmental influences and symptomatology leading to fibroids for their early detection. Furthermore, there is a need for new medical treatments to be developed as alternatives to treat the symptoms, prevent the occurrence in susceptible or genetically predisposed women, avoid surgical intervention particularly when fertility preservation is the goal and reduce recurrences post-surgery in women at high risk.
Proper guidelines must be devised to promote health education and early screening. In addition, a systematic course of early management must be concocted based on the size, number, shape, extent of myomas and their dynamic relation with the surrounding tissues to avoid invasive procedures, reduce morbidity and improve quality of life socio-economically.

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Table 1: Table showing association between sociodemographic factors versus multiple number and types of Uterine Fibroids

Variable		Number of fibroids 1	≥2	p-value	Types of fibroids 1	≥2	p-value
Address	Rural	4(23.5%)	13(76.5%)		9(52.9%)	8(47.1%)	
	Urban	37(39.4%)	57(60.6%)	0.213	61(64.9%)	33(35.1%)	0.347
Religion	Hindu	21(45.7%)	25(54.3%)		33(71.7%)	13(28.3%)	
	Muslim	20(30.8%)	45(69.2%)	0.109	37(56.9%)	28(43.1%)	0.111
Regular consumption red meat	NO	2(33.3%)	4(66.7%)		3(50.0%)	3(50.0%)	
	YES	39(37.1%)	66(62.9%)	-	67(63.8%)	38(36.2%)	0.668
BMI	Normal	31(37.8%)	51(62.2%)		55(67.1%)	27(32.9%)	
	Overweight	10(34.5%)	19(65.5%)	0.750	15(51.7%)	14(48.3%)	0.141
Marital status	Married	37(37.0%)	63(63.0%)		63(63.0%)	37(37.0%)	
	Unmarried	2(28.6%)	5(71.4%)	0.778	4(57.1%)	3(42.9%)	0.834
	Widow	2(50.0%)	2(50.0%)		3(75.0%)	1(25.0%)	
Parity	<3	32(39.0%)	50(61.0%)		56(68.3%)	26(31.7%)	
	≥4	9(31.0%)	20(69.0%)	0.444	14(48.3%)	15(51.7%)	0.055
No. of Abortions	1	40(38.5%)	64(61.5%)		67(64.4%)	37(35.6%)	
	≥2	1(14.3%)	6(85.7%)	0.257	3(42.9%)	4(57.1%)	0.420

Table 2: Table showing association between presenting symptoms versus number of fibroids and type of Uterine Fibroids.

Presenting symptom		Number of fibroids 1	≥2	p-value	Types of fibroids 1	≥2	p-value
Irregular menstrual cycles	YES	27(65.9%)	47(67.1%)		46(65.7%)	28(68.3%)	
	NO	14(34.1%)	23(32.9%)	0.889	24(34.3%)	13(31.7%)	0.781
HMB	YES	35(85.4%)	60(85.7%)		60(85.7%)	35(85.4%)	
	NO	6(14.6%)	10(14.3%)	0.960	10(14.3%)	6(14.6%)	0.960
Prolonged bleeding	YES	17(41.5%)	26(37.1%)		26(37.1%)	17(41.5%)	
	NO	24(58.5%)	44(62.9%)	0.652	44(62.9%)	24(58.5%)	0.652
Frequent cycles	YES	6(14.6%)	12(17.1%)		10(14.3%)	8(19.5%)	
	NO	35(85.4%)	58(82.9%)	0.729	60(85.7%)	33(80.5%)	0.471
Infrequent cycles	YES	7(17.1%)	6(8.6%)		8(11.4%)	5(12.2%)	
	NO	34(82.9%)	64(91.4%)	0.225	62(88.6%)	36(87.8%)	-
Blood clots	YES	24(58.5%)	42(60.0%)		41(58.6%)	25(61.0%)	
	NO	17(41.5%)	28(40.0%)	0.880	29(41.4%)	16(39.0%)	0.803
Dysmenorrhea	YES	28(68.3%)	53(75.7%)		48(68.6%)	33(80.5%)	
	NO	13(31.7%)	17(24.3%)	0.395	22(31.4%)	8(19.5%)	0.172
Pelvic pain	YES	21(51.2%)	41(58.6%)		37(52.9%)	25(61.0%)	
	NO	20(48.8%)	29(41.4%)	0.452	33(47.1%)	16(39.0%)	0.406
Fullness of abdomen	YES	7(17.1%)	15(21.4%)		13(18.6%)	9(22.0%)	
	NO	34(82.9%)	55(78.6%)	0.579	57(81.4%)	32(78.0%)	0.666
Frequent urination	YES	3(7.3%)	11(15.7%)		6(8.6%)	8(19.5%)	
	NO	38(92.7%)	59(84.3%)	0.198	64(91.4%)	33(80.5%)	0.094
Infertility	YES	3(7.3%)	9(12.9%)		7(10.0%)	5(12.2%)	
	NO	38(92.7%)	61(87.1%)	0.530	63(90.0%)	36(87.8%)	0.758

Table 3: Table showing association between number and types of Uterine Fibroids against surgical and medical intervention

Variable		Surgical intervention No	Yes	p-value
Number of fibroids	1	7(17.1%)	34(82.9%)	0.542
	≥2	9(12.9%)	61(87.1%)	
Types of fibroids	1	14(20.0%)	56(80.0%)	0.029
	≥2	2(4.9%)	39(95.1%)	
Variable		**Mifepristone No**	**Yes**	**p-value**
Number of fibroids	1	33(80.5%)	8(19.5%)	0.561
	≥2	53(75.7%)	17(24.3%)	
Types of fibroids	1	54(77.1%)	16(22.9%)	0.912
	≥2	32(78.0%)	9(22.0%)	