



RETROSPECTIVE STUDY OF UTERINE FIBROID PATIENTS AT TERTIARY LEVEL HOSPITAL

Obstetrics & Gynaecology

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ABSTRACT

Background: Fibroids are the most common benign tumours of the uterus. They can be asymptomatic or might present with different symptoms varied from heavy menstrual bleeding, dyspareunia, abdominal distension, or pressure-related bladder symptoms etc. Present study was done with the aim to assess the clinical features of uterine fibroids. **Material & methods:** It was a retrospective Hospital based study conducted over a period of six months in which 131 women who attended Gynecology OPD of a tertiary care teaching hospital in Rajasthan from January to June 2019 with complaints of menstrual disorders with anemia or abdomino-pelvic mass with pain and feeling heaviness in the abdomen were included. **Results:** Out of 131 women, 37 (28.2%) women presented to Gynecology OPD with abdomino-pelvic mass without any menstrual abnormality while 94 (71.8%) women were symptomatic. 53.4% women presented with Heavy menstrual bleeding while Dysmenorrhea (n=65; 49.6%), Fullness/heaviness in abdomen (n=61; 46.6%), Irregular period (n=57; 43.5%), Prolonged duration of menstrual bleeding (n=42; 32.0%), Constipation/bloating/diarrhoea (n=41; 31.3%) and non-menstrual pelvic pain/cramping (n=39; 29.8%) were other symptoms seen in women with fibroids. **Conclusion :** Uterine fibroids cause abnormal uterine bleeding and other symptoms which have negative impact on women's quality of life, affecting their sexual, social and professional life. Early diagnosis and treatment reduces morbidity and improves quality of life.

KEYWORDS

uterine fibroids, uterine bleeding, quality of life, Abdomino-pelvic mass

INTRODUCTION

Uterine fibroids also known as leiomyomas are slow growing, benign, monoclonal tumors arising from smooth muscle cells which are found in human uterus^[1]. Uterine fibroids are most common tumors affecting women and incidence of fibroids varies from 20-40% in reproductive age women and 11-19% in perimenopausal age women and it has been assumed that it occurs in around 70% of women by the start of menopause.^[2]

The ovarian steroid hormones estradiol and progesterone induces mature cells of leiomyoma for releasing mitogenic stimuli to adjacent immature cells providing uterine leiomyoma with the undifferentiated cells supporting tumor growth. Progesterone causes development and proliferation of the leiomyoma cells and estradiol predominantly by increases availability of progesterone receptors (PRs) thereby increasing tissue sensitivity to progesterone. The growth of leiomyoma is dependent on estrogen production, especially continuous estrogen secretion not interrupted by pregnancy or lactation. This is postulated to be an important risk factor for the myomatous fibroid development.^[3,1] The physiologic actions of progesterone is due to interaction with progesterone receptor (PR), which is a member of nuclear hormone superfamily of the ligand-activated transcription factors. There are two predominant isoforms of PR, designated as PR-A and PR-B. Few studies implicate that PR levels in leiomyomas remain unchanged during menstrual cycle and high concentration of PR-A and PR-B is seen in leiomyoma tissue compared to myometrial tissue^[3,2]. Response of leiomyoma cells to estradiol is by increased expression of both PR isoforms.

They can be asymptomatic or may present from a range of mild, moderate, severe or chronic symptoms. The most common symptom patient presents with is heavy menstrual bleeding leading to anemia, fatigability and dysmenorrhea. Other symptoms are non-cyclic pain, abdominal protuberance, dyspareunia, pelvic pressure and bladder or bowel dysfunction leading to urinary incontinence, urinary retention, dysuria or constipation. They can also be associated with reproductive problems like infertility, pregnancy complications or loss, and adverse obstetric outcomes.^[4]

The present study makes an effort to analyze the symptoms of uterine fibroids with which the patient presents to gynecology OPD over a period of six months in a tertiary care centre and hence, a hospital based descriptive retrospective study was conducted in Mahatma Gandhi Medical College and Hospital with a motive to assess the symptomatology of uterine fibroids.

MATERIAL AND METHODS

This is retrospective hospital based time bound study conducted over a period of six months from January to June 2019 in the department of Obstetrics and Gynaecology of a tertiary care teaching hospital in Jaipur with an aim to assess symptomatology of uterine fibroid.

A total of 131 cases were included who were diagnosed with uterine fibroid attending Gynecology OPD with complaints of menstrual disorders with anemia or abdomino-pelvic mass with pain and feeling of heaviness in the abdomen. Pregnant women with fibroids were excluded from our study.

Information was retrieved from previous medical records and files obtained from MRD which included socio-demographic data like age, parity, clinical symptoms associated with fibroid, clinical findings on examination and USG findings followed by management.

Statistical analysis

The data was collected in a structured coded and entered into Microsoft Excel Spreadsheet and analysed using appropriate tests and presented as number and percentage.

OBSERVATIONS AND RESULTS

Out of the 131 subjects, more than three fourth (n = 99; 75.5%) of the women were in the age group of 36-45 years while 28 (21.4%) were in the age group of 46-55 years old. Mean age of study subject was 47.62 ± 7.82 years. Most of the uterine fibroid were seen in premenopausal women. More than two-third (n=88; 67.1%) women were having two or more children while only 3 were nulliparous. 37 (28.2%) women presented to gynae OPD with abdomino-pelvic mass without any menstrual abnormality while rest 94 (71.8%) women were symptomatic.

Table 1: Demographic distribution of study subjects (n=131)

Presenting symptoms	Study Subjects	
	Number	Percentage
Age group		
26-35 years	4	3.0
36-45 years	99	75.5
46-55 years	28	21.5
Parity		
Nulliparous	3	2.3
P1	40	30.6
≥P2	88	67.1

Table 2: Distribution of uterine fibroid-related symptoms (n=131)

Presenting symptoms	Study Subjects	
	Number	Percentage
Asymptomatic fibroid	37	28.2
Symptomatic fibroid (n=94)		
Heavy menstrual bleeding	70	53.4
Prolonged duration of menstrual bleeding	42	32.0
Dysmenorrhea	65	49.6
Non-menstrual pelvic pain/cramping	39	29.8
Irregular period	57	43.5
Fullness/Heaviness in abdomen	61	46.6
Constipation/bloating/diarrhoea	41	31.3

Most common presenting complaint was heavy menstrual bleeding 70 (53.4%) followed by dysmenorrhea (n=65; 49.6%) (Table 2). Largest size of fibroid was 32 weeks which was seen in a 41-year-old nulliparous woman who came for confirmation of pregnancy. Post-operative diagnosis in that case was single intramural fibroid of weight 3.3 kg.

Table 3: Clinical finding in women with fibroids (n=131)

Clinical findings	Study Subjects	
	No.	Percentage
Pelvic mass	94	71.7
Anaemia	99	75.6
Lump in the abdomen	20	15.3
Cervical fibroids	9	6.9

On clinical examination pelvic mass was seen 94 (71.7%) women while anemia was seen in 99 (75.6%) women (Table 3).

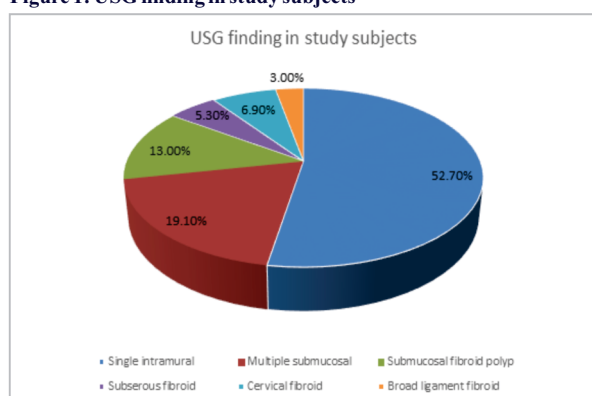
Figure 1: USG finding in study subjects

Figure 1 shows ultrasonography finding in study subjects which shows that most common finding was single intramural fibroid seen in 69 (52.7%) patients followed by multiple submucosal fibroids in 25 (19.1%).

Table 4: Type of management done in uterine fibroid subjects

Management of fibroid	Number	Percentage
Hysterectomy	101	77.1
Insitu hysterectomy with leiomyomatous polyp	2	1.5
Conservative surgery (n=28)		
Myomectomy	16	12.2
Fibroid Polypectomy	12	9.2

Out of 131 women with fibroid, abdominal hysterectomy was done in 101 (77.1%) patients and in 2 patients Insitu hysterectomy with leiomyomatous polyp was done while rest were managed conservatively (Table 4).

DISCUSSION

Uterine fibroids are slow growing benign tumors arising from smooth muscle cells of the myometrium. Slow growing asymptomatic fibroids grow to huge size with minimal menstrual disturbances.^[5] Despite the fact that their cause is still unknown, yet there is considerable evidence that estrogens and progestogens proliferate tumor growth,^[6,7] as the

fibroids rarely appear before menarche^[8] and regress after menopause.^[9]

In our study, 37 (28.2%) women presented to gynae OPD with abdomino-pelvic mass without any menstrual abnormality while rest 94 women were symptomatic. 70 (53.4%) women presented with heavy menstrual bleeding while in 65 (49.6%) women dysmenorrhea was present. Fullness/Heaviness in abdomen (n=61; 46.6%), Irregular period (n=57; 43.5%), Prolonged duration of menstrual bleeding (n=42; 32.0%), Constipation/bloating/diarrhoea (n=41; 31.3%) and non-menstrual pelvic pain/cramping (n=39; 29.8%) were other symptoms seen in women with fibroids. Finding of our studies are consistent with other studies.^[10-12] In study by Munusamy MM et al^[10], 34.8% women presented with Feeling of fullness of abdomen while 18.1% women had Heaviness of abdomen, lump in the abdomen as presenting symptoms. While the association between uterine bleeding symptoms and myomas is long known, the patho-mechanism is not understood yet. Possible causes are venous ectasia resulting from mechanical compression of veins by myomas, or altered function, expression or storage of vasoactive growth factors produced by myomas.^[13,14] Finding of our study also suggests that apart from uterine bleeding symptoms, women with uterine fibroids suffer more frequently from multiple gynecological pain symptoms. In the study by Faiza in Pakistani women from Rawalpindi, intramural asymptomatic fibroid was seen in 23.1% women who presented with abdominal pain.^[5]

In our study, pelvic mass was seen in 94 (71.7%) women, anemia was seen in 99 (75.6%) women while in 20 (15.3%) women lump in the abdomen was present. Apart from that, cervical fibroids was also observed in few patients (n=9; 6.9%). In study by Munusamy MM et al^[10], anemia was seen in 66% women with fibroid while dysmenorrhea was seen in 25% subjects. 16 women had polyps (11.8%) which protruded through external cervical OS, 3 had fundal leiomyomatous fibroid polyps with thick pedicle which could not be removed vaginally. Various authors have reported that menorrhagia was the commonest menstrual pattern in symptomatic submucosal fibroids.^[5,16,17] Menorrhagia and polymenorrhea was seen in observations made by the same authors in 25.9% by Faiza, 10% of Khayde RL study.^[10] TaranFA et al^[18] has reported 33% of his subjects had adenomyosis associated with leiomyoma presented with pelvic pain. He observed that women who had severe pelvic pain despite smaller fibroids detected by sonogram more likely to have concomitant adenomyosis.^[18]

In present study, out of 131 subjects with fibroid, on ultrasonography single intramural fibroid was seen in 69 (52.7%) patients, Multiple submucosal fibroids in 25 (19.1%), Submucosal fibroid polyp in 12 (9.2%), cervical fibroid in 9 (6.9%) patients and subserous fibroid was seen in 9 (6.9%) patients. In 4 (3.0%) patients adenomatous hyperplasia was seen while broad ligament fibroid was also seen in 4 (3.0%) patients (Figure 1). In study by Munusamy MM et al^[10], adenomatous hyperplasia reported by sonogram in 8 cases while adenomyosis with seedling fibroids was seen in 14 subjects with sonological diagnosis. Pathological findings in hysterectomy, specimens reported by Sajjad M from Pakistan shows uterine fibroids and adenomyosis were the common abnormality detected.^[15] In her study in 22% cases no gross or microscopic abnormality was detected.

In our study, out of 131 women with fibroid, abdominal hysterectomy was done in 101 (77.1%) patients while in 2 patients Insitu hysterectomy with leiomyomatous polyp was done. Conservative surgery was done in 28 patients amongst which myomectomy was done in 16 (12.2%) patients while polypectomy was done in 12 (9.2%) patients. (Table 4). In study by Munusamy MM et al^[10] also abdominal hysterectomy was most common surgical procedure done in 64.7% cases while myomectomy was done in 16.3% cases and polypectomy in 11.7% cases.

CONCLUSION

Uterine fibroids pose a major concern for women of reproductive age group, importantly for those above 40 years and impose a heavy clinical burden on women. Uterine fibroids cause abnormal uterine bleeding and other symptoms which have negative impact on women's life, affecting their sexual, social and professional life. Early diagnosis and treatment reduces morbidity and improves quality of life.

Due to limited data on uterine fibroid data on epidemiology,

symptomatology and their impact on women's health, further research is required to assess the clinical burden of quality of life of patient and how it is affecting the overall society.

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