

TITLE

TO STUDY VARIOUS RISK FACTORS AND CLINICAL PROFILE OF PATIENTS WITH UTERINE FIBROID UNDERGOING SURGICAL MANAGEMENT AT A TERTIARY CARE CENTRE.

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Abstract

Fibroids (leiomyomata) are the commonest benign pelvic tumour in women of reproductive age group. They are an important health care concern because they are the most frequent indication for hysterectomy. This study was conducted to know various risk factors and clinical profile of patients with uterine fibroid undergoing surgical management at a tertiary care centre. It was a retrospective cohort study. Data from the medical records of all the patients who underwent abdominal hysterectomy/myomectomy between time period of 1st May 2018 to 31st Dec 2019 at our tertiary care centre was collected. This was followed by analysis of various risk factors and varied clinical presentations of those patients having uterine fibroid. In this study, none of the earlier postulated risk factors for uterine fibroid was present in any patient. The most common clinical presentation was lower abdominal pain(49%) and the most common type of fibroid was posterior intramural type of fibroid (44%).Hence it can be concluded that uterine fibroid has got a wide spectrum of clinical presentations and possibly riskfactors understanding of which require further research study.

Key words- fibroid, hysterectomy, infertility

INTRODUCTION

Fibroids (leiomyomata) are the commonest benign pelvic tumour in women of reproductive age group. These are monoclonal tumours of the smooth muscle cells of the myometrium and depending on their site of origin they may be intramural, submucosal or serosal, but at times might be present at unusual sites like the broad ligament or cervix.

The actual cause behind the development of these benign tumours is still not certain but various genetic, hormonal, growth factors have been cited as the probable reasons. A number of risk factors like age, family history, ethnicity, weight, diet, exercise, contraceptives, pregnancy, smoking also affect the development of leiomyomas.

Uterine fibroids have been seen to be a significant cause of morbidity as they lead to a wide range of symptoms like heavy menstrual bleeding, pelvic pain, infertility, recurrent pregnancy loss and pressure symptoms, thus affecting the quality of life of women

.Diagnosis is chiefly clinical, aided by ultrasonography.

The management ranges from expectant, conservative, to surgical and should be individualized on the basis of the severity of symptoms, size of the fibroid, the desire for fertility, and the response to initial mode of management. The purpose of this study is to know various risk factors and varied clinical presentations of different types of fibroid.

MATERIAL AND METHODS

It was a retrospective cohort study which was conducted at a tertiary care centre. After excluding patients by exclusion criteria which include patients who underwent vaginal hysterectomy(for any cause), patients who underwent abdominal hysterectomy for causes other than fibroid like endometrial hyperplasia, adenomyosis , endometrial polyp, chronic pelvic pain and obtaining waiver of consent, case sheets from medical record department of all patients with uterine fibroid in age group of 35 to 45 yrs who underwent abdominal hysterectomy/abdominal myomectomy during time period between 1st May 2018 to 31st dec 2019 was reviewed.

From those records, the following variables were noted like parity, age of menarche, age of menopause, BMI, addictions, history of oral/injectable contraceptive intake, family history of fibroid, history of thyroid disorders, history of bleeding disorders and these were noted in performas.

This was followed by documentation of presenting symptoms, other associated symptoms, their duration, any medical management taken earlier or not and whether they have responded to it or not.

Finally the type, size, site and number of fibroid was noted as per the imaging (USG/MRI) or intraoperative findings. The appropriate descriptive statistics (numbers and percentages) was applied to record the data and data was entered and analyzed by MS excel- 2007.

RESULT

In our study, 45 patients underwent surgical management for fibroid during study period among which 91% had total abdominal hysterectomy and 9% had abdominal myomectomy(Table no. 1).

Table 1.-

SN	Operative Procedure	No. of Cases	Percentage
1.	Abdominal Myomectomy	4	9
2.	TAH	41	91
	TOTAL	45	100

Of total no of cases, 4% patients were nulliparous & 96% were parous (Table no. 2).

Table 2.-

SN	Parity	No of Cases	Percentage
1.	Nulliparous	2	4

2.	Parous	43	96
	TOTAL	45	100

None of the patients had h/o cigarette smoking, hypertension, early menarche or has achieved menopause. BMI of the patients ranged between 20.5 to 30.5 kg/m². The age of the patients who underwent myomectomy ranges from 35 to 40 yrs & for TAH, it was between 40 to 45 yrs.

In clinical presentation, 49% patients presented with c/o Lower abdominal pain, 29% presented with c/o menorrhagia, 11% patients presented with c/o infertility & 11% patients were presented with dysmenorrhoea (Table no. 3).

Table 3.-

SN	Presenting Complaint	No of Cases	Percentage
1.	Lower abdominal pain	22	49
2.	Menorrhagia	13	29
3.	Infertility	5	11
4.	Dysmenorrhoea	5	11
	TOTAL	45	100

Out of 45 cases, 44% patients had intramural fibroid, 29% patients had submucous & 27% patients had subserosal fibroid (Table no. 4).

Table 4.-

SN	Type of fibroid	No of Cases	Percentage
1.	Intramural	20	44
2.	Submucosal	13	29
3.	Subserosal	12	27
	TOTAL	45	100

Regarding their location, 44% patients had posterior fibroid, 33% patients had anterior fibroid & 23% patients had fundal fibroid (Table no. 5).

Table 5.-

SN	Location of fibroid	No of Cases	Percentage
1.	Posterior	20	44
2.	Anterior	15	33
3.	Fundal	10	23

	TOTAL	45	100
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53% patients had fibroid of size > 5 cms,31% patients had between 3 to 5 cms & 16% patientshad < 3 cms(Table no. 6).

Table 6.-

SN	Size of fibroid(cms)	No of Cases	Percentage
1.	< 3	7	16
2.	3-5	14	31
3.	>5	24	53
	TOTAL	45	100

49 % of total patients received prior medical management.

DISCUSSION

.Uterine fibroids are one of the most common benign tumors found in women. They usually develop in reproductive age group. A retrospective study conducted by Mitesh Gavli et al on “ sociodemographic and clinical profile of patients underwent for myomectomy” showed that 63% of patients were between 25 to 35 yrs of age[1].In our study, all patients were between age group of 35 to 45 years .The patients who underwent myomectomy belong to age group of 35 to40 yrs and who underwent total abdominal hysterectomy belong to age group of 40 to 45 yrs.

The younger age group in former case can be explained by desire to preserve their fertility &menstrual function.

Various risk factors have been postulated for the development of uterine fibroid. In one study conducted by E A Stewart on “Epidemiology of uterine fibroids: a systematic review”, 12 risk factors including black race, age, premenopausal state, hypertension, family history, time since last birth, food additive and soybean milk consumption increased uterine fibroid riskwhile use of oral contraceptives or the injectable contraceptive like depot medroxyprogesterone acetate, smoking in women with low body mass index and parity reduced uterine fibroid risk[2].In our study, no such risk factors were present.

In various studies conducted by Buttran VCJR & Okolo S showed that vast majority of leiomyoma are asymptomatic & most common symptom is abnormal uterine bleeding[3,4].Instudy conducted by Mitesh Gavli et al,44% of patients had lower abdominal pain,24% had infertility,18% had menorrhagia and 13% has dysmenorrhoea[1].In our study, 49% presentedwith lower abdominal pain which correspond with Gavli study. Lumsden MA,Wallace EM in their study “ Clinical presentation of uterine fibroids” found that 30% of women suffered from menorrhagia[5].In our study,29% presented with menorrhagia. In other studies, pelvic pressure, bowel dysfunction, and bladder symptoms such as urinary frequency and urgency has also been reported. In our study, none of the patients had such kind of symptoms. In Mitesh Gavli study ,most of the patient had anterior wall (58.18%) intramural (56.36%) type of fibroid[1].In ourstudy most of the patients had posterior wall (44%) intramural (44%)type of fibroid.

The limitation of this study is that it has got a very few number of cases and it is a medicalrecord

based study so there could be chances of missing relevant information.

Hence, another high-quality prospective observational study is required which can improve our understanding about various risk factors and varied clinical presentations of uterine fibroid thus guiding in its optimal management.

CONCLUSION

From this retrospective cohort study, it can be concluded that uterine fibroid has got various risk factors understanding of which require further high quality research study. They have a wide clinical spectrum in different patients ranging from asymptomatic to symptoms requiring medical and surgical management. Surgical management include myomectomy and hysterectomy and is generally done for symptomatic patients not responding to medical management or with big size fibroid.

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