

ORIGINAL ARTICLE

FREQUENCY OF FIBROID UTERUS IN MULTIPARA WOMEN IN A TERTIARY CARE CENTRE IN RAWALPINDI

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Background: At least 20% of all women and 40% of women over the age of 40 years have uterine leiomyomas. They distort the overlying endometrium and can become extruded or pedunculated (fibroid polyp) in the endometrial canal. The diagnosis of myomas is usually based upon the finding of an enlarged, mobile uterus with an irregular contour on bimanual examination or an incidental finding on transabdominal sonography. The objective of this study was to study the frequency of fibroid uterus in multipara women as observed by physical examination and ultrasonography. **Methods:** During this descriptive study period all the patients reporting Fauji Foundation Hospital with menstrual irregularity partly and fulfilling the inclusion criteria were included. **Results:** Out of 140 patients with fibroid uterus presenting to gynaecology department 108 (77.14%) were multiparous while 32 (22.86%) were primiparous. The mean parity was 5. The mean maternal age came to be 46 years. Most common presenting complaint of patients with uterine leiomyoma in this study was menstrual irregularity with menorrhagia in 42 (38.9%), metrorrhagia in 28 (25.9%), polymenorrhagia in 8 (7.4%) patients. The other presenting complaint was abdominal mass which was seen in 25 (23.1%). **Conclusion:** Multiparous patients were found to have fibroids more frequently than nulliparous in their perimenopausal years, which shows their characteristic slow growth rate. The most common manifestation was menorrhagia.

Keywords: Multiparity, Frequency, Fibroid

INTRODUCTION

Leiomyoma is a smooth muscle tumour. At least 20% of all women and 40% of women over the age of 40 years have uterine leiomyomas. Most myomas are intramural, some are subserosal but submucosal or subendometrial myomas are least common. They distort the overlying endometrium and can become extruded or pedunculated (fibroid polyp) in the endometrial canal. Most leiomyoma occur in the fundus and body of the uterus, and only 3% occur in the cervix. Both oestrogen and progesterin receptors are present in leiomyoma. Elevated oestrogen level may cause its enlargement during first trimester of pregnancy, thus 15–30% myomas may enlarge during pregnancy and shrink during puerperium. Some of them may decrease in size during pregnancy. Fibroids have not been described in pre-pubertal girls but they are occasionally noted in adolescents. Most women with symptomatic fibroids are in their 30s or 40s. Myomas are clinically apparent in approximately 25% percent of reproductive aged woman and noted on pathological examination in approximately 80% of surgically excised uteri.

The diagnosis of myomas is usually based upon the finding of an enlarged, mobile uterus with an irregular contour on bimanual examination or an incidental finding on transabdominal sonography. Imaging techniques are useful when it is necessary to confirm the diagnosis or to improve localisation of myoma prior to surgery. Asymptomatic uterine leiomyomas are usually managed expectantly. Factors that are considered prior to initiating treatment include:

size of myoma, location of myoma, symptoms, woman age and reproductive plan. The type and timing of intervention should be individualised based upon the woman's discomfort, pregnancy plan and obstetrical history, the likelihood of age, hormonal therapy-related progression or regression of the neoplasm. Parity decreases the chance of fibroid formation and fibroids are known to be associated with infertility.

This study has been designed to analyse the frequency of fibroid uterus in multipara women of our area.

MATERIAL AND METHODS

This work was carried out in the patients reporting to Gynaecology Department, Fauji Foundation Hospital Rawalpindi. The study was carried out for a period of one year. All patients who were reporting to Gynaecology Department Fauji Foundation Hospital Rawalpindi with a palpable pelvic mass, associated menstrual irregularity, parity 4 and above, were included. Women with no palpable pelvic mass associated with menstrual irregularity, parity less than 4, and women who were diagnosed to have ovarian mass on ultrasonography were excluded. Pre-designed proforma were filled at the time of presentation, and further findings of menstrual irregularity, pelvic mass by examination per abdomen, bimanual examination and ultrasonography were entered on the proforma.

Data was analysed by using SPSS-11. The Parametric tests were utilised for Gaussian distribution whereas non-parametric tests would be used for non-

Gaussian data. The statistical tests were from the same group of descriptive as well as inferential statistics.

RESULTS

The age of the patients ranged from 29 years to 64 years. The mean age was 36 years. Most of our patients ranged between 35–48 years of age. Out of 140 patients of fibroid uterus, 108 (77.14%) patients were multiparous and 32 (22.86%) were primiparous. Minimum parity was 4 and maximum parity was 10. Mean parity was 5. Out of 140 patients of fibroid uterus, 42 (38.9%) presented with menorrhagia, 28 (25.9%) with metrorrhagia, 25 (23.1%) with abdominal mass, 8 (7.4%) with polymenorrhagia, 3 (2.8%) with abdominal pain, and 2 (1.9%) presented with vague complaints. Fibroid size as observed in the study by ultrasonographic evaluation showed that in most of the patients the mean size was 6.3 Cm. Per abdominal examination in most of the women the uterus size ranged between 14–16 weeks, while in some cases it was 18–20 week size.

The presenting complaints and parity of the patients are presented in Table-1.

Table-1: Presenting complaints and parity of patients

Presenting Complaints	Parity				Total
	4	5	6	7	
Menorrhagia	17	14	5	6	42
Metrorrhagia	6	6	7	9	28
Abdominal Mass	10	6	6	3	25
Polymenorrhagia	1	4	2	1	8
Abdominal Pain	1			2	3
Miscellaneous	1			1	2

DISCUSSION

In the present study, maternal age ranged from 29–64 years. The mean maternal age was 46 years, which is in congruence with other international studies, which shows that uterine fibroids are more common in the 3rd and 4th decades of life.¹ Among the women with fibroids 77.14% were between 29–64 years of age. Ashraf T,² observed that 80% of symptomatic patients with fibroid present between the ages of 31–50 years. The youngest patient in her study was 20 years.

Fibroid uterus was more common among our patients in multiparous women. About 77% of our patients were multiparas with parity 4 and above. Same observation was made by Rashid Hafiz *et al*, who observed that 74% of the patients had parity between 1–5.³ Same observation was also made by Shamshad Begum.⁴ She observed that majority of the patients were multiparous (72%) and 28% were nulliparous. Our observation is contrary to that reported by Derek LJ⁵ and Maron⁶, Connell⁷ and Ludwig⁸. According to them leiomyomas are more common in the nulliparous women.

Fibroids are oestrogen-dependent, thus their usual age distribution is from menarche to menopause.

They grow slowly so that they rarely present problems until third decade of life. In our study, multiparous women were found to have fibroids more frequently in their peri-menopausal years, which shows their characteristic slow growth rate.

Since menorrhagia occurs in 9–14% of population of healthy women, many general practitioners will encounter menorrhagia related problems.⁹ Multiparous women usually develop menstrual irregularities and usually it is observed that they attribute these complaints to any contraceptive method. It was observed during this study that multiparous women who were later on diagnosed to have fibroid uterus had a variety of menstrual complaints and lower abdominal swelling which was mistakenly thought by patient to be weight gain after child birth. Repeated episodes of menstrual complaints made them report to hospital and get themselves investigated. Fibroid uterus was found to be a significant finding on vaginal examination and was confirmed by ultrasonography.

Menorrhagia is thought to be associated with uterine fibroids, adenomyosis, DUB, pelvic infection, endometrial polyp and presence of foreign body such as intrauterine contraceptive device. However, in our study menstrual irregularity was mainly associated with fibroid uterus. Fibroids in multiparous women are an important cause of menorrhagia.¹⁰

According to our study, uterine fibroids which eventually developed in more than 50% of women are asymptomatic but can cause a range of symptoms and complications that challenge clinicians. For example, they can mask the diagnosis of ovarian tumours and confuse the management of menopause by causing abnormal uterine bleeding.¹¹

Fibroids was a common finding in multipara women in our study with menorrhagia and other menstrual complaints with those of the submucosal type in particular have been associated with menorrhagia. Research has shown that fibroids are associated with disordered uterine motility but it is not clear that whether this is because of mechanical factors or because of abnormalities of prostaglandin metabolites.

In our study out of 108 multiparous patients, majority (42, 38.9%) of the women presented with menorrhagia, followed by 28 (25.95%) presenting with metrorrhagia. The relationship between menstrual blood loss and duration of menstruation is open to dispute. Haynes *et al* (1977)¹² studied 50 women with menstrual blood loss of 80 ml or more, including 12 women whose loss exceed 200 ml and 5 women whose loss exceeded 450 ml and found no significant correlation between menstrual blood loss and duration of menstruation. Rybo¹³ concluded that when duration of menstruation exceeded 7 days then mean menstrual blood loss was greater than 50 ml. It has generally been agreed that

90% of menstrual blood loss occurs in the first 48–72 hours in both normal menstruation and in menorrhagia. Similar findings were seen in the study by Rashid *et al.*³

Along with major complaint of menorrhagia, associated symptoms were also sought out, 8 patients presented with polymenorrhagia, 3 with abdominal pain, 25 (23.1%) had abdominal mass along with menstrual disturbances. Sir Jusign and Bassa (1994)¹⁴ made a study on 103 patients who underwent abdominal myomectomy. This study revealed that menorrhagia and infertility were the commonest presenting complaints. In study of Tasneem Ashraf² incidence of infertility was 20.6% which is quite contrary with incidence of multiparity in our study.

In our study, diagnosis of leiomyoma was made on clinical findings and on USG done in all patients to arrive on final diagnosis. So, basic decisive tool was ultrasonography. According to Gambone *et al.*,¹⁵ the diagnosis of uterine fibroids is made with approximately 95% confidence on the basis of clinical findings. A study by Abraham¹⁶ showed that diagnosis of myoma is usually based on clinical findings but USG is also helpful as it confirm that the tumours are not extra uterine masses. Computed tomography and Magnetic resonance imaging cannot be used as a routine in our set-up because of high cost.¹⁶

It was also observed that most of the women who reported to our hospital were from the peripheral hospitals around Rawalpindi. They belonged to lower socioeconomic class, most of them were illiterate and had been going to some local general practitioners, *hakeems*, lady health visitors and also to dais for their menstrual complaints. Most of the women who reported to us were multiparous, 108 out of 140 patients (77.14%) were those who had already completed their family, and only 32 patients (22.86%) were primiparous and mainly those who were second wives.

CONCLUSION

Fibroid uterus is found more frequently in late reproductive and peri-menopausal years. Menorrhagia is quite a common problem affecting large number of females and is a common cause for presentation to both

the general practitioners and the gynaecological outpatient clinic. Fibroid is one of the important cause of menorrhagia in young patients with low parity but multipara are not spared. Most of the patients belong to low socio-economic status. Diagnosis is made with confidence on clinical findings but ultrasonography is a simple and effective diagnostic tool.

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