



# A Clinico Pathological Correlation Study Of Leiomyoma Of Uterus In A Tertiary Care Centre

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## ABSTRACT

**BACKGROUND:** Leiomyoma of the uterus forms the most common type of benign tumour of the uterus and also most common pelvic tumour in women. The symptomatology continues to be variable. Surgery has for long been the main mode of therapy for the myomas. For women who wish to retain their uterus for future pregnancies or other reasons myomectomy is known.

**OBJECTIVE:** To analyse the clinico pathological spectrum in cases of Leiomyoma of the uterus in MVJ Medical College & Research Hospital to know the pattern of presentation, pathological correlation with type of fibroid and endometrial and ovarian changes.

**MATERIALS AND METHODS:** A clinical study of 200 cases of fibroid uterus was made in Department of Obstetrics and Gynaecology, MVJ Medical College & Research Hospital, Hoskote. The cases were selected by random allocation and detailed examination, clinical examination and investigations were made.

**RESULTS:** Leiomyomas are most commonly seen in the women of child bearing age, most commonly occurring in the 3rd decade (58%) and in multiparous women (91%). Among the fibroids, 97% were in the body & 3% were cervical region. The intramural fibroids were the commonest variety comprising about

63% of the cases. The histopathological pattern showed proliferative endometrial in 69%, secretory changes in 10%, endometrial hyperplasia in 5% cases, cystic glandular hypertrophy in 3%, atrophic endometrium in 7% cases. Associated findings were adenomyosis in 13%, chronic cervicitis in 82%, endometriosis in 3% and PID in 7% of the cases.

**CONCLUSION:** Leiomyoma is the most common uterine tumour seen in gynaecological practice. Menstrual disturbances are the commonest symptom of which menorrhagia is the most common presentation. Most of these tumours are intramural in location. Proper diagnosis and timely management are essential to avoid complications of these tumours.

**KEYWORDS:** Pathological changes, Leiomyoma, Myometrium, Hysterectomy, Myomectomy

## **INTRODUCTION:**

Uterine fibroids are one of the common benign tumours of uterus seen in women of reproductive age group. These constitute 5-10% of all these tumours <sup>[1]</sup>. Uterine leiomyomas are benign growth of uterine smooth muscles which are accompanied by connective tissue. Their predominant occurrence in the reproductive age group is associated with concurrent expression of higher levels of oestrogen receptors and they tend to shrink during hypoestrogenic states such as after menopause <sup>[2,3]</sup>.

They have been classified according to their location as intramural, subserosal, submucosal and cervical. Intramural fibroids are commonest and are located within the wall of the uterus. Subserosal fibroids are located underneath the mucosal surface of the uterus. Submucosal fibroids are located in the muscle beneath the endometrium of the uterus and tend to distort the uterine cavity. Cervical fibroids are located in the wall of the cervix <sup>[4]</sup>.

## **OBJECTIVE:**

To analyse the clinico pathological spectrum in cases of Leiomyoma of the uterus in a rural tertiary care centre..

## **METHODOLOGY:**

After getting clearance from the institute and informed written consent from the patients enrolled in our study, they were subjected for thorough examination. On admission, a detailed history, clinical

examination and investigations were done. The diagnosis of fibroid uterus was made by clinical examination and relevant investigations in majority of our patients, considering the menstrual history, firm mass in the hypogastric region, transmitting movement from cervix to mass and vice versa. Diagnosis was confirmed by ultrasonography in all cases. Diagnostic curettage was done to rule out any endometrial pathology especially in elderly patients and to know the hormonal status in infertile patients. In patients with infertility, semen analysis of husband and tubal testing were made before undertaking conservative surgery. All routine investigations were done for all cases. Intravenous pyelography and hysterosalpingography were done in selected cases.

At laparotomy, the size of uterus, number and situation of fibroids, condition of tubes and ovaries were noted. In cases posted for myomectomy, tubal patency was tested utilising methylene blue dye. The ovaries were conserved in cases of hysterectomies unless associated with pathology and in elderly patients. The removed specimen was cut anteriorly in the midline and near the cornu to inspect the cavity and seedling fibroids. The specimen was sent for histopathological examination of endometrial and myometrium. The microscopic examination were done to confirm the lesions, for degenerative changes, associated endometrial pathology & adenomyosis and for the changes in the ovaries, tubes and cervix.

### **Statistical Analysis:**

The data was collected and compiled in MS Excel. Descriptive statistics has been used to present the data. To analyse the data SPSS (Version 26.0) was used. Significance level was fixed as 5% ( $\alpha = 0.05$ ). Qualitative variables are expressed as frequency and percentages and Quantitative variables are expressed as Mean and Standard Deviation.

### **RESULTS:**

Leiomyomas are most commonly seen in the women of child bearing age, most commonly occurring in the 3rd decade (58%) followed by 4th decade (33%), 2nd decade (8%) and 5th decade (1%) with the mean age being  $35.68 \pm 3.2$  years. Though Leiomyoma is a disease of low parity, in our study, we have noted it to be common in multiparous women as well (91%).

In our study, the size of the fibroid uterus varied from a few centimetres to gravid uterus of 30 weeks size. About 73% were of the size of gravid uterus, 21% were of the size between 16-20 weeks

gestation and huge fibroids of > 20 weeks gestation were encountered in 6% of the patients. All the leiomyomata were corporeal and no extra uterine fibroid were encountered. Among the fibroids, 97% were in the body & 3% were cervical region. The intramural fibroids were the commonest variety comprising about 63% of the cases.

The histopathological pattern of endometrium was studied. It showed proliferative endometrium in 69% of cases, secretory changes in 10% of cases, endometrial hyperplasia in 5% of cases, cystic glandular hypertrophy in 3% of cases, atrophic endometrium in 7% of cases. The results were inconclusive in 6% of the cases. The associated pathology in the adnexa and other pelvic structures were studied, which showed cystic ovaries in 12% of the cases. A variety of cysts were noted like, simple serous cyst, follicular cyst, serous/papillary cystadenoma, dermoid cyst, corpus luteal cyst. Associated findings were adenomyosis in 13% of the cases, chronic cervicitis in 82% of the cases, endometriosis in 3% of the cases and PID in 7% of the cases.

		Frequency (N)	Percentage %
<b>Age</b>	<b>2<sup>nd</sup> decade</b>	16	8
	<b>3<sup>rd</sup> decade</b>	116	58
	<b>4<sup>th</sup> decade</b>	66	33
	<b>5<sup>th</sup> decade</b>	2	1
<b>Parity</b>	<b>Nulliparous</b>	18	9
	<b>Multiparous</b>	182	91
		Frequency N	Percentage %
<b>Surgeries performed</b>	<b>TAH</b>	86	43
	<b>TAH+BSO</b>	58	29
	<b>NDVH</b>	16	8
	<b>Myomectomy</b>	14	7
	<b>TLH</b>	10	5
	<b>TAH+ USO</b>	6	3
	<b>VH with prolapsed uterus</b>	4	2
	<b>Diagnostic laparoscopy</b>	4	2

	<b>LAVH</b>	2	1
<b>Size of fibroid</b>	<b>16 weeks</b>	146	73
	<b>16-20 weeks</b>	42	21
	<b>&gt; 20 weeks</b>	12	6
<b>Types of fibroids</b>	<b>Intramural</b>	126	63
	<b>Multiple</b>	34	17
	<b>Submucous</b>	22	11
	<b>Subserous</b>	12	6
	<b>Cervical</b>	6	3
	<b>Broad ligament</b>	2	1

## **DISCUSSION:**

Leiomyomas are usually asymptomatic. Symptoms may be seen depending on their size, location and hormonal effects. Menorrhagia is the commonest clinical manifestations. Other symptoms are dysmenorrhoea, pain and feeling of a mass in the abdomen. It can also lead to infertility and sexual dysfunction <sup>[5]</sup>. Symptomatic leiomyomas are treated by myomectomy in younger women desirous of retaining the childbearing function. Hysterectomy is done in those who have completed their family <sup>[6]</sup>. The other treatment modalities includes myomectomy or drug therapy (GNRH analogues), depending on various factors like parity, size, symptomatology, etc.

## **CONCLUSION:**

Leiomyoma is the most common uterine tumour seen in gynaecological practice. Menstrual disturbances are the commonest symptom out of which menorrhagia is the most common presentation. Most of these tumours are intramural in location. Proper diagnosis and timely management are essential to avoid complications of these tumours.

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