

CLINICAL EVALUATION AND HISTOPATHOLOGICAL ANALYSIS OF 100 CASES OF FIBROID UTERUS IN SHAHEED SUHRAWARDY MEDICAL COLLEGE**Dr. Ruma Akter^{1*}, Dr. Nasima Akter², Dr. Md. Shah Alamgir³ and Dr. Tahmina Hossain⁴**¹Senior Consultant, Gynae, 250 Beded General Hospital, Manikganj, Bangladesh.²Assistant Professor, Gyane and Obs, OSD-DGHS, Attached Col. Malek Medical Manikgonj, Bangladesh.³Senior Consultant, Anesthesia, 250 Beded General Hospital, Manikganj, Bangladesh.⁴Assistant Professor, Gyane, Kurmitola General Hospital, Dhaka, Bangladesh.***Corresponding Author: Dr. Ruma Akter**

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ABSTRACT

Background: The tumour is well circumscribed but not encapsulated (Various terms were used to refer to the tumour included. It is also termed myoma or fibromyoma and is popularly called a fibroid. **Objective:** To carefully analyze history and clinical examination of uterine myoma patient's. **Method:** This study was a prospective study. The study was carried on during the period of October, 2006 to June 2007. This study was carried out in the department of obstetrics and gynaecology, Shaheed Suhrawardy Medical College, Dhaka. It deals with 100 cases of leiomyoma of uterus. **Results:** Among the 100 patients in this study (58%) were above 40 years. Majority of the patients (82%) were between 36-50 years of age, The range of the age was 21-56years. In most of the patients onset of symptoms were gradual and progressive indicating slow growth of the tumor. A number of patients suffered from various medical conditions (58%). Among them 26% had obesity, 18% had hypertension, 8% had diabetes and 6% had both hypertension and diabetes. **Conclusion:** Diagnosis of myoma was not difficult in most of the cases. Clinical diagnosis was based on history, examination and also pelvic ultrasonography report.

KEYWORDS: Tumour, fibromyoma, leiomyoma, myoma.**INTRODUCTION**

Leiomyoma of uterus is a common gynaecological problem in our country. They occur in 20-25 percent of women over the age of 30 years.^[1,2] It is a benign tumour composed mainly of smooth muscle but containing varying amount of fibrous tissue. The tumour is well circumscribed but not encapsulated (Various terms were used to refer to the tumour included). It is also termed myoma or fibromyoma and is popularly called a fibroid.^[3] The cause of uterine leiomyoma is not known. There is evidence that each individual leiomyoma is unicellular in origin (monoclonal) from glucose -6- phosphate A dehydrogenase studies. Multiple chromosomal abnormalities are detected in approximately 50 percent of leiomyoma by cytogenetic analysis.^[3] Though causes is obscure, oestrogen has been considered as the major promoter of myoma growth. Leiomyoma contain oestrogen receptors in higher concentration than in the surrounding myometrium but in lower concentration than in the endometrium.^[4] Myoma may arise from any part of mullerian duct, but most commonly develop in the myometrium. The tumour grow slowly, often only manifest in the fourth decade of life Racial factors have some role in the

aetiology of myoma.^[5] It is 3-9 times more frequent in black than in white A. Leiomyoma is rare before the age of 20 years. They most commonly produce symptoms between the age of 35 to 45 years, but exist in microscopic form before the age of 30 years.^[5] Uterine Leiomyoma are a frequent cause of menorrhagia, dysmenorrhoea, reduced fertility and recurrent pregnancy loss. The typical leiomyoma is a firm, multinodular structure of variable size, frequently multiple as many as 200 may be found in one uterus. It's rate of growth is slow.^[6] However, the rate of growth varies from patient to patient, slowing of growth is most likely after menopause, but at least 10 percent of myoma continue to grow after this period. Leiomyoma may be complicated by degeneration, which is most common.^[7] Other changes that might occur are sarcomatous change, torsion, infection etc. Malignant change in leiomyoma is estimated to be less than 0.2percent.

In most instances, myoma do not require treatment, particularly if there is no symptom or if the patient is postmenopausal.^[8] Although no definitive medical therapy is currently available, various hormonal substances can be tried e.g. GnRH analogue or

danazol. Still now definitive treatment of leiomyoma is surgical.^[9] Traditionally two main operations are available: Myomectomy and hysterectomy. In hysterectomy -two types of hysterectomy are found. One is total abdominal hysterectomy and another is laparoscopic assisted vaginal hysterectomy and Laparoscopic myomectomy which can be done upto 12 weeks size.^[10] In this short period of study, attempts have been made to highlight some clinical idea about this common tumour related to its incidence, age distribution, clinical presentation, management, post operative complications and histopathological findings.

OBJECTIVE

The aims and objective of the present study are.

1. To carefully analyze history and clinical examination of uterine myoma patient's.
2. To find out the relation of leiomyoma with age, parity, socio economic condition etc.
3. To evaluate clinical presentation, management and post operative complications.
4. To analyse the histopathological findings.

METHODOLOGY

Type of Study: It was a prospective study.

Duration of the Study: The study was carried on during the period of October, 2006 to June 2007.

Place of the Study: This study was carried out in the department of obstetrics and gynaecology, Shaheed Suhrawardy Medical College, Dhaka.

Study Materials: It deals with 100 cases of leiomyoma of uterus.

Inclusion Criteria. All patients having fibroid uterus admitted to the ward in the department of obstetrics and gynaecology of Shaheed Suhrawardy Hospital, Dhaka.

Exclusion criteria: Following was excluded from this study.

1. Pregnancy with leiomyoma.
2. Diagnosis of leiomyoma during caesarean section

Study Methods: This is a prospective study among 100 patients having fibroid uterus. Diagnosis was made on the basis of history and clinical examination. Necessary investigation were done including hematological and ultrasonography for management purpose and for confirmation of diagnosis. Per operative finding were noted and all specimen were sent for histopathological examination. Data for each individual patient were collected on predesigned data collection sheet (Appendix) the data yielded from this study were compiled and analyzed by standard statistical procedure.

RESULT

This prospective study included 100 consecutive cases of leiomyoma of uterus admitted and managed in the Department of Obstetrics and gynaecology, Shaheed Suhrawardy Hospital, Dhaka, from Oct 2006 to June 2007. The results are tabulated in the following ways.

Table 1: Age Distribution of Patients (n=100).

Age group (years)	Number of patients	Percentage %
20	0	0%
21-25	6	6%
26-30	6	6%
31-35	6	6%
36-40	24	24%
41-45	36	36%
46-50	12	12 %
>-50	10	10%

Table -1 Shows that among the 100 patients in this study (58%) were above 40 years. Majority of the

patients (82%) were between 36-50 years of age, The range of the age was 21-56years.

Table 2: Parity Distribution of Patients (n=100)

Para	Number of patients	Percentage %
0	10	10%
1-2	30	30%
3-5	60	60%
6-8	6	6%
>8	4	4%

Table 2: Majority of patients were in para 3-5 group: Among the nulliparous group
2- patients were unmarried

3- had abortion
2- were widow for 15years 3- had primary sterility

Table 3: Age of Last Child.

Age of last child in years	Number of patients	Percentage %
1-5	4	4%
6-10	20	20%
11-15	24	24%
16-20	42	42%

Table 3: Most patients had last child 16-20 years back.

Table 4: Duration Of Symptoms (n=100).

Duration	Number of patients	percentage
Up to 1 year	24	24%
1-3 years	54	54%
4-5 years	16	16 %
> 5 years	6	6%

In most of the patients onset of symptoms were gradual and progressive indicating slow growth of the tumor (table -4)

Table 5: Associate Medical Condition (n=50)

Medical condition	Number of patients	Percentage
Obesity	26	26%
Hypertension	18	18%
Diabetes	8	8%
Both hypertension & diabetes	6	6%
No associated disease	42	42%

A number of patients suffered from various medical conditions (58%). Among them 26% had obesity,18%

had hypertension,8% had diabetes and 6% had both hypertension and diabetes. (Table-5)

Table 6: Finding at Operation (n=100).

Findings	Number of potions	Percentage
SIZE OF UTERUS:		
Bulky uterus	8	8%
8-12 weeks gestation size	50	50%
13-16 weeks gestation size	26	26%
17-20weeks gestation size	8	8%
> 20 weeks gestation size	8	8%
POSITION OF MYOMA:		
Corpus and fundus	96	96%
Cervical	2	2%
Broad ligament	2	2%
LOCATION OF MYOMA		
Intramural	82	82%
Subserous	10	10 %
Submueous	8	8%
NUMBER OF MYOMA:		
Single	40	40%
Multiple	60	60%

The numbers of myoma removed from each women varied from one to multiple. The myomas were subserous in 10%, intramural in 82% and submucous in 8% and 2% was cervical Frequently a woman had more than one type of myoma.

Table 7: Associated Findings (n=100)

Associated finding	Number of patients	Percentage
Cystic ovary	8	8%
Endometriosis	3	3%
Pelvic inflammatory disease	12	12 %
Polycystic ovary	4	4%
Endometrial carcinoma	1	1%
No other pathology	72	72%

Leiomyoma was found to be associated with cystic ovary in 8%, endometriosis in 3%, polycystic ovary in

4%, pelvic inflammatory disease in 12% cases and endometrial carcinoma in 1% case.

Table 8: Histopathological findings (n=100)

Findings	Number of patients	Percentage
Simple leiomyoma	20	20%
Leiomyoma with endometrial hyperplasia:		
Cystic	12	12 %
Adenomatous	0	0%
Leiomyoma with degenerative Change:		
Hyaline	4	4%
Cystic	2	2%
Leiomyoma with Endometriosis	4	4%
Leiomyoma with chronic cervicitis	30	30%
Leiomyoma with adenomyosis	28	28%

Routine histopathological examinations were arranged for all the patients.

Table 16: shows the main histopathological finding were leiomyoma with chronic cervicitis were observed in 30% cases, Leiomyoma with adenomyosis in 28% case Simple leiomyoma in 20% cases, leiomyoma with endometrial hyperplasia in 12 cases, degenerative changes in 6% cases and endometriosis in 4% cases.

DISCUSSION

Uterine Fibroids are commonest tumour found in women. It is a common gynaecological problem in our country. Our present study is to find out the common presenting features, relation of leiomyoma with age, parity. If the risk factors are identified early and the disease is diagnosed at an early stage when management will be simple and patient morbidity and mortality will be less.

Leiomyoma occur and increase in size during the reproductive years and may regress after the menopause. It has been estimated that 20-25 percent of women over the age of 30 years have myoma. They most commonly produce symptoms between the age of 35-45 years but probably exist in microscopic form before the age of 30 years. In this present series, age of the patients ranged from 21-56 years, Majority of the cases were in the age group between 36-50 years. In this study peak incidence was 36-50 years which do not correlate with the other

studies where the showed peak incidence of age is between 35 to 45 years.

Myoma are common in nulliparous or infertile women. But in this study majority of the patients had more than three children. Emembolu (1982 - 84) showed in a series of 196 cases where maximum (75.5%) patients were nullipara or primipara, only 24.5% patients were multipara.^[11]

Muran et al (1971) showed in a series of 186 cases where average parity was 2.74 -2.9.^[12] Rahman RRB (1988) studied 50 cases at SSMCH, where maximum patients were multiparous and parity was mostly in between 3-5.^[13] Khan M (1997) studied 50 cases at IPGMR (now BSMMU), where maximum patients were multiparous. It indicates that myoma uterus in our country is more common in multiparous women.^[14]

Early marriage and early child bearing is common in our country. So women complete their family comparatively earlier in life. Long standing secondary infertility may play an important role in aetiology of myoma. Most of the patients of present series had their last child 16-20 years back, probably this is a considerable factor which encouraged the growth of myoma.

It has been estimated that among infertile women with myoma in only 5-10% cases were responsible for infertility. In the present series, all patients were multiparous except ten, two were unmarried and two

were widow. Three patients had primary infertility and three patients had secondary infertility. Total infertility were 6% Emembolu et al (1982-84) at Nigeria showed that 87.2% patients had infertility problem.^[6] The high incidence of infertility in the study of Emembolu was due to prevalence of pelvic inflammatory disease associated with myoma in that part of Nigeria (Northern Nigeria) which is not a common problem in our country. The explanation given by them for association of pelvic inflammatory disease (PID) with myoma is that PIO causes peri-ovarian fibrosis which leads to hyper oestrogenism that in turn makes myoma to grow. Rahman RRB (1988) in a study at SSMCH, Dhaka showed that infertility among myoma patients are 8%.^[13] Khan M (1997) in a study at IPGMR now BSMMU, Dhaka showed that infertility among myoma patients are 18%, This study is comparable to other studies done in Bangladesh.^[14]

CONCLUSION

Diagnosis of myoma was not difficult in most of the cases. Clinical diagnosis was based on history, examination and also pelvic ultrasonography report. Most of the patients were from middle and lower socioeconomic group, Obesity 26%, hypertension 18%, were the common associated problem.

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