

# Management of Uterine Leiomyoma at A Tertiary Care Hospital

ARCHANA SINHA, MINU SHARAN

## ABSTRACT

**Introduction:** Fibroids or leiomyomas are benign slow growing tumours arising from smooth muscle, usually of the uterus, though it may arise from any of the organ having smooth muscle as its content. They are one of the commonest tumours affecting women of reproductive age group. Only about 30% of women diagnosed with fibroid become symptomatic.

**Aims and Objectives:** The aim of our study was to evaluate uterine leiomyomas, their varying presentations and the treatment options available at our centre, a hospital of eastern India.

**Materials and Methods:** This retrospective study was conducted in the Department of Obstetrics & Gynaecology, IGIMS Patna, India, during August 2013 to September 2014.

Fifty women diagnosed with uterine leiomyoma elsewhere and referred to us, were included in the study group. Patients were managed medically and surgically depending on age, parity, desire for future pregnancy and severity of symptoms. The diagnosis of fibroid was confirmed post operatively by histopathological examination of the specimen in surgical patients.

**Conclusion:** This study reconfirmed that uterine fibroid though asymptomatic in majority, can be mysterious in its presentations in few patients leading to diagnostic dilemmas. In this study we got some interesting locations like broad ligament fibroid & cervical fibroid confirmed on laparotomy. Also the myriad of treatment options available are very helpful to patients in choosing what would be best for them.

**Keywords:** Hysterectomy, Myomectomy, Uterine fibroids

## INTRODUCTION

Fibroids or leiomyomas are benign slow growing tumours arising from smooth muscle, usually of the uterus, though it may arise from any of the organ having smooth muscle as its content. They are one of the commonest tumours affecting women of reproductive age group. Only about 30% of women diagnosed with fibroid become symptomatic. They produce symptoms depending on their site and size [1]. A variety of treatment options are available for symptomatic fibroids, some causing only symptomatic relief while a few may cause reduction in the size of the myoma.

## MATERIALS AND METHODS

This retrospective study was conducted in the Department of Obstetrics & Gynaecology, IGIMS Patna, India, during August 2013 to September 2014. Fifty women diagnosed with uterine leiomyoma elsewhere and referred to us, were included in the study group. Their case history and clinical examination findings were noted and necessary radiological investigations were carried out.

A detailed record of timing of presentation, complaints at the time of presentation, uterine size at the time of presentation, sociodemographic characters of the patient i.e. age, marital status, parity was carried out. PBAC (Pictorial blood loss assessment chart) score was used to assess menstrual blood loss and VAS (Visual analog scale) was used for other symptoms [2]. Patients were managed medically and surgically depending on age, parity, desire for future pregnancy and severity of symptoms. Out of 50 patients in the study group, five refused further treatment and were considered as lost to follow up. Patients were managed medically and surgically depending on age, parity, desire for future pregnancy and severity of symptoms. Previous treatment history, if any, was also recorded. Patients managed medically were young girls suffering from only menorrhagia and with myomas >5cm. Drugs were prescribed randomly and patients were called for follow up at 1, 3 and 6 months. At the time of follow up, they were examined clinically as well as radiologically. Myomectomy was done in those patients anxious for further issue whereas

hysterectomy was done in cases above 35yrs of age with completed family. The diagnosis of fibroid was confirmed post operatively by histopathological examination of the specimen in surgical patients.

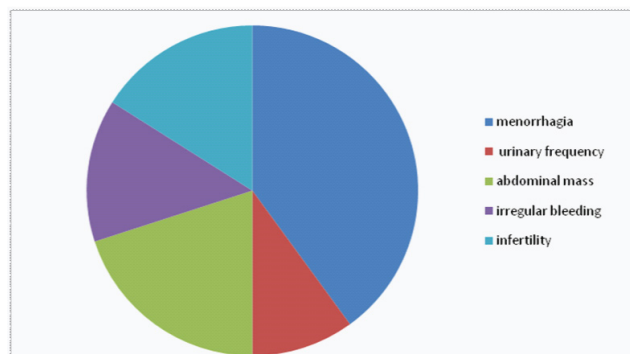
## RESULTS

### 1. Timing of presentation:

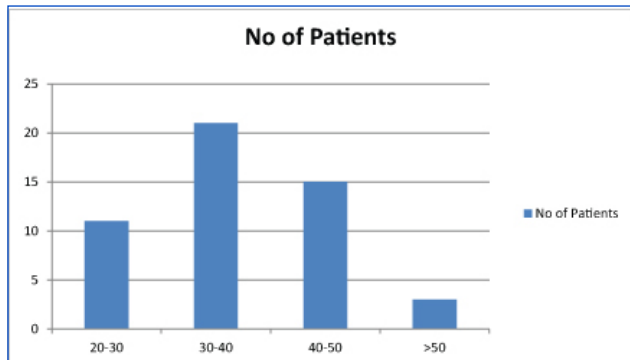
- Early [<6months of onset of symptoms]:-14
- Late [>6months of onset of symptoms];-36

### 2. Complaints at presentation:[Table/Fig-1]

- menorrhagia-20
- urinary frequency-5
- abdominal mass-10



[Table/Fig-1]: Showing variety of complaints



[Table/Fig-2]: Showing age distribution of patients

- irregular bleeding-7
- infertility -8

### 3. Uterine size at presentation:

- <20 wks - 30
- 20-30 wks - 17
- >30wks - 3

### 4. Sociodemographic characters of the patients: [Table/Fig-2]

- Age- 20-30 yrs : 11  
30-40 yrs : 21  
40-50 yrs : 15  
>50 yrs : 3
- Marital status- Unmarried -10  
Married- 40
- Parity- Nullipara - 5  
Multipara - 35  
Grandmultipara- 10

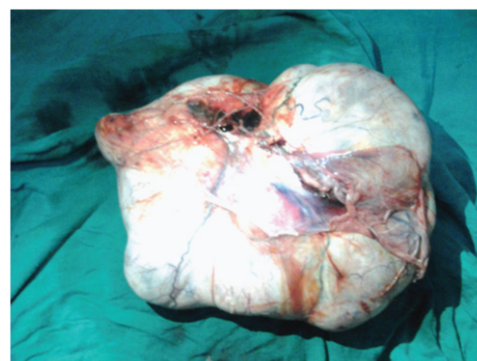
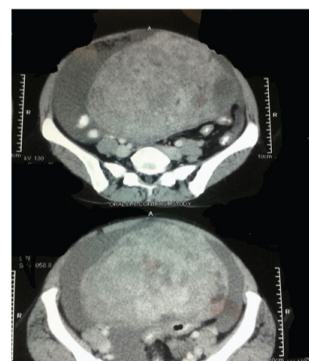
### 5. Unusual presentations: [Table/Fig-3-6]

- Broad ligament fibroid -2
- Cervical fibroid – 2
- Fibroid polyp – 2
- Pseudomeigs syndrome - 1
- Parasitic fibroid -1

### 6. Management:

Type of Management	No of Patients
Medical Management	12
Surgical Management	33
Refused further treatment	5

Five girls responded to OCPs. One patient responded to mifepristone 10 mg daily for three months. Three perimenopausal women opted for GnRH analog and are doing well in follow-up. Three patients were applied Emily.



[Table/Fig-3]: Preoperative X-ray showing right pleural effusion [Table/Fig-4]: Postoperative X-ray showing resolution of pleural effusion

[Table/Fig-5]: CT Scan showing subserous fibroid [Table/Fig-6]: Gross specimen of broad ligament fibroid

Myomectomy was done in three of the infertile patients. Total abdominal hysterectomy was done in 29 patients. In one patient with preopdiagnosis of pedunculated fibroid intraoperative findings were consistent with a smooth well encapsulated tumour attached to rectus muscle with no connection with the uterus. HPE of the specimen confirmed the diagnosis of parasitic fibroid. In the patient operated with a preoperative diagnosis of PseudoMeig's syndrome, after surgery pleural effusion and ascites disappeared.

## DISCUSSION

Fibroids or leiomyomas are slow growing tumours of the uterus [2]. They are one of the commonest tumours affecting women of reproductive age group. Only about 30% of women diagnosed with fibroid become symptomatic. They produce symptoms depending on their site & size [1]. Intramural fibroids are the commonest ones but they produce symptoms only when they are big enough to distort the uterine cavity. On the contrary, submucosal leiomyomas produce symptoms earlier as compared to others. A pedunculated submucosal fibroid may present as cervical polyp. Similarly, a pedunculated subserosal one may become a parasitic fibroid. Rarely, fibroids develop from the smooth muscle-containing structures like broad ligaments. We encountered few interesting locations like broad-ligament & cervical fibroids, as well as one of the rarest presentation ie. Pseudo-Meig's syndrome [3]. In this case the patient had subserous fibroid with right hydrothorax and ascites [Table/Fig-1-3].

A variety of treatment options are available for symptomatic fibroids, some causing only symptomatic relief while a few may cause reduction in the size of the myoma. NSAIDs, OCPs & Levonorgestrel containing intrauterine system [Emily] are useful in patients suffering from menorrhagia [4,5]. Danazol is very effective in treating fibroid and it also decreases the size of fibroid but it is usually not prescribed because of its side-effects [6]. Gonadotropin releasing hormone analogues decrease the serum estrogen levels and leads to temporary regression of the fibroid. They are usually prescribed preoperatively to shrink the size of the tumour to make its removal easier [7]. Progesterone-antagonist Mifepristone,

causes marked improvement of symptoms [8,9]. Recently, Uterine artery embolisation and Radiofrequency ablation have been tried, with good results. Surgical treatment is chosen when medical means fail or the patient opts for it. Myomectomy is done in those desirous for future pregnancy [10], while hysterectomy may be the last resort in those with completed families with huge fibroids.

## CONCLUSION

This study reconfirmed that uterine fibroid though asymptomatic in majority, can be mysterious in its presentations in few patients leading to diagnostic dilemmas. In this study we got some interesting locations like broad ligament fibroid & cervical fibroid confirmed on laparotomy. Also the myriad of treatment options available are very helpful to patients in choosing what would be best for them.

## REFERENCES

- [1] Wallach EE, Vlahos NF (August 2004) Uterine myomas: An overview of development, clinical features and management *Obstet Gynecol.* 104(2):393-406.
- [2] Zakherah MS, Sayed GH, El-Nashar SA, Shaaban MM: Pictorial Blood Loss Assessment Chart in the Evaluation of Heavy Menstrual Bleeding: Diagnostic Accuracy Compared to Alkaline Hematin. *Gynecol Obstet Invest.* 2011, 71(4):281-84.
- [3] Lurie S. Meig's syndrome- History of eponym [2000]. *Em.J.Obstet Gynecol Reprod. Biol.* 92(2).
- [4] American Society of Reproductive Medicine Patient Booklet-Uterine fibroids. 2003.
- [5] FDA approves new device to treat uterine fibroids-Press release-FDA 2004-10-22.
- [6] Delco V la Marca A, Margante G. Short term treatment of uterine fibromyomas with danazol. *Gynecol. Obstet Invest.* 1999;47,25-62.
- [7] Adamson GD. Treatment of uterine fibroids with GnRH agonists *Am J. Obstet Gynecol.* 1992;166:746-51.
- [8] Murphy AA, Kettel LM, Morales AJ, et al. Regression of uterine leiomyomas in response to antiprogestosterone RU -486. *J. Clin Endocrin Metab.* 1993;76:513-17.
- [9] Kulshretha V. Low dose mifepristone in medical management of uterine leiomyoma. *Indian J Med Res.* 2013; 137:1154-62.
- [10] Metwally M, Cheong YC, Horne AW. Surgical treatment of fibroids for subfertility. *Cochrane Database Syst Rev.* 2012 Nov 14;11:CD003857. doi:10.1002/14651858.CD003857.pub3. Review. PMID:23152222

### AUTHOR(S):

1. Dr. Archana Sinha
2. Dr. Minu Sharan

### PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor, Department of Obstetrics and Gynaecology, Indira Gandhi Institute of Medical Sciences, Patna, India.
2. Associate Professor, Department of Obstetrics and Gynaecology, Indira Gandhi Institute of Medical Sciences, Patna, India.

### NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Archana Sinha  
Lalit Kunj, Atardah, Pokhariya Peer Lane, Po-Ramna,  
Distt-Muzaffarpur, Bihar-842002, India.  
E-mail: Dr.sushant@ymail.com

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None.

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