Spectrum of Fibroid Presentation in a Tertiary Care Centre

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Received: 25-11-2018; Revised: 28-12-2018; Accepted: 05-01-2019.

ABSTRACT

Uterine fibroids (also known as leiomyomas or myomas) are the most common form of benign uterine tumors. Clinical presentations include abnormal bleeding, pelvic masses, pelvic pain, infertility, bulk symptoms and obstetric complications. A case series study conducted at Saveetha Medical college Obstetrics & Gynaecology Department. We are reporting the various presentations of fibroid during the period of 5 months (January – May 2018) at Saveetha medical college and hospital. Case series of 7 patients with fibroid were analysed. Their demographic data, history, clinical presentation and management were analysed. Incidence rate of fibroid from this case series was 14%. All of them were parous women and median age group 43 years. Most common symptoms reported in our series were mass abdomen 42% and intraoperative findings of huge fibroids, belonging to group 4 of FIGO classification with average size of 15 cm. Two women had family history of fibroid. All of them with mass abdomen managed with hysterectomy. One infertility woman with huge mass managed by myomectomy. One patient with 3.2x2.4 cm underwent medical management with ulipristal acetate, with significant reduction in size of fibroid and AUB (Abnormal Uterine Bleeding), she is under regular follow up. One woman with infected fibroid polyp was treated with antibiotics and subsequently underwent polypectomy followed by vaginal hysterectomy. From this study there is no doubt that surgery remains mainstay in management. Early diagnosis of fibroid can be managed with medical treatment. Newer medical treatment aids in reducing size of fibroid which can result in minimal access surgery and can avoid major surgery.

Keywords: Fibroid, ulipristal acetate, hysterectomy, myomectomy.

INTRODUCTION

Leiomyomas are benign smooth muscle neoplasm that typically originate from the myometrium.¹ Their incidence is cited as 20 to 25%, but has been shown to be high as 70 to 80% in studies using histologic or sonographic examination.² They are monoclonal tumours of uterine smooth muscle, thus originating from the myometrium. They are composed of large amounts of extracellular matrix (ECM) containing collagen, fibronectin and proteoglycans.¹

In many women, leiomyomas are clinically insignificant. Conversely, their number, size and location can provoke a variety of symptoms. First-degree relatives of women with fibroids have a 2.5 times increased risk of developing fibroids.³ Rapid uterine growth is not well defined, and almost never indicates sarcoma in premenopausal women. Sarcomas are rare and more likely occur in postmenopausal women with symptoms of pain and bleeding. Sonography is the most readily available and least costly imaging technique to differentiate fibroids from other pelvic pathology. However, MRI permits more precise evaluation of the number, size and position of fibroids and can better evaluate their proximity to the endometrial cavity.⁴

The presence of submucosal fibroid decreases fertility and removing them can increase fertility. Most fibroids do not increase in size during pregnancy. During pregnancy they can undergo red degeneration.

Watchful waiting for asymptomatic fibroids, may allow treatment to be deferred. Fibroids regress in size after menopause.

METHODS

A case series study conducted at Saveetha Medical College Obstetrics & Gynaecology Department. Fibroid admitted and managed at a tertiary care centre between January 2018 and May 2018 were analysed.

Total gynecology admissions between the month of January and May 2018 in a single unit of Saveetha medical college was 104. 14 patients reported with fibroid uterus, of which 7 patients reported with AUB, they were not willing for further management. The other 7 cases are being reported here. Incidence rate of fibroid in our study was 13%.

RESULTS

Age distribution

Figure 1: The age distribution of the 7 reported cases of fibroid uterus was between 35-50 years, with the lowest
being 35 years. There was one postmenopausal women of 50 years.

**Presenting Symptoms:**

![PRESENTING SYMPTOMS](image)

**Figure 2:** Of the 14 patients, 4 presented with mass abdomen, 8 presented with pain abdomen & abnormal uterine bleeding (AUB), 1 presented with mass descending per vaginum and 1 presented with infertility.

**Risk Factor**

![MODIFIABLE RISK FACTORS](image)

**Figure 3:** 4 (57%) patients were obese, and 2 (28.5%) had hypertension, none had red meat as a risk factor.

**Non modifiable:**

![NON MODIFIABLE RISK FACTORS](image)

**Figure 4:** 2 patients had a family history of fibroids, 1 was nulliparous and 1 had a history of early menarche.

**Size and location of the fibroid:**

**Table 1:** The intraoperative findings of all the 7 cases are presented in terms of their size, location and FIGO (Federation Internationale of Gynaecologists and Obstetricians) staging.

<table>
<thead>
<tr>
<th>Size</th>
<th>Location</th>
<th>FIGO Staging</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5x8x9 cm</td>
<td>Intramural</td>
<td>4</td>
</tr>
<tr>
<td>7 cm (largest)</td>
<td>Multiple intramural</td>
<td>4</td>
</tr>
<tr>
<td>2.5x1.5x1.5 cm</td>
<td>Subserosal</td>
<td>7</td>
</tr>
<tr>
<td>16x13x10 cm</td>
<td>Intramural</td>
<td>4</td>
</tr>
<tr>
<td>16x14x11 cm;</td>
<td>Cervical fibroid</td>
<td>8</td>
</tr>
<tr>
<td>24x17x14 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14x10 cm</td>
<td>Fibroid poly</td>
<td>0</td>
</tr>
<tr>
<td>3x2cm</td>
<td>Intramural</td>
<td>4</td>
</tr>
<tr>
<td>10X8cm</td>
<td>Intramural</td>
<td>4</td>
</tr>
</tbody>
</table>

**Medical management**

One patient was started on medical management. Tablet Ulipristal acetate 10mg once daily for 13 weeks. Patient is under regular follow up. She has completed 1 month of treatment. There is sufficient reduction in pain and heavy menstruation assessed by the menstrual pictogram. Monthly blood test, and USG to assess efficiency and side effects.

**Surgical management:**

**Hysterectomy**

![Hysterectomy](image)

**Figure 6:** intraoperative and preoperative pictures of the 5 case that underwent hysterectomy.
Myomectomy

Figure 7: the case of infertility, who underwent myomectomy.

DISCUSSION

Uterine fibroids are the most common benign pelvic tumors in women, although prevalence may be underestimated due to asymptomatic women. Prevalence estimates range from 4.5% to 68.6% depending on study population and diagnostic methodology. The incidence of uterine leiomyoma was 13% in our study population.

In our study, 42% of patients were between 40-45 years similar to a study by Lahori et al., were majority of patients were between 41-50 years (46.84%).

Almost a third of women with leiomyomas will request treatment due to symptoms. Current management strategies mainly involve surgical interventions, but the choice of treatment is guided by patient's age and desire to preserve fertility or avoid ‘radical’ surgery such as hysterectomy. The management of uterine fibroids also depends on the number, size and location of the fibroids. Surgical and non-surgical approaches include myomectomy by hysteroscopy, myomectomy by laparotomy or laparoscopy, uterine artery embolization and interventions performed under radiologic or ultrasound guidance to induce thermal ablation of the uterine fibroids.

There is growing evidence of the crucial role of progesterone pathways in the pathophysiology of uterine fibroids. Selective progesterone receptor modulators (SPRMs) such as ulipristal acetate (UPA), are being increasingly used.

The need for alternatives to surgical intervention is very real, especially for women seeking to preserve their fertility. These options now exist, with SPRMs which are proven to treat fibroid symptoms effectively.

CONCLUSION

From this study there is no doubt that surgery still remains indicated in some incidence. We should establish the diagnosis early so that fibroid will be managed with medical treatment itself to avoid major surgery or less invasive surgery.

Since most of our case reported with huge and rapidly increasing size of fibroid, gene expression involved in rapid growth of fibroid, in our population, to be researched.

REFERENCES


Source of Support: Nil, Conflict of Interest: None.