

Uterine Fibroids: A Ten Year Clinical Review in Ile-Ife, Nigeria

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Abstract

Objectives: The study is a ten year retrospective review to determine the incidence, clinical presentation and mode of management of uterine leiomyoma (fibroids) at the Obafemi Awolowo University Teaching Hospital, Ile-Ife, Nigeria.

Methods: The data from all case notes of histologically confirmed cases of uterine fibroids managed at the Ife state Hospital, Ile-Ife, from January 1st, 1999 to December 31st 2008 formed the basis of this study. Information related to the demography, clinical features, mode of treatment and complications were collected and analysed.

Results: During the period studied, there were 4444 gynaecological admissions and 320 cases of uterine leiomyoma (fibroids) giving an incidence of 7.20% of all gynaecological admissions. Majority (67.81%) of the patient was 30-49 years old and 60% were of low parity (0-2). Common presenting features were menstrual disorders (66.88%), abdominal swelling (45%), abdominal pain (33.10%), infertility (30%) and anaemia (30%). Uterine size at presentation was greater than twelve weeks in 76.56% of cases. The operative treatment involves hysterectomy in 35% of cases while myomectomy was done in 65% of cases. The common post-operative complications were pyrexia (10%), Anaemia (8.12%) and wound infection (5.32%).

Conclusions: Late presentation of patients makes the fibroids to be huge and complicated with symptoms before they were diagnosed. It is advisable that women in the reproductive age group should be periodically examined to detect this growth earlier. This will prevent various complications recorded in this study. Surgery remains the main mode of management in our environment.

Key words: Uterine Leiomyoma, Fibroids, Presentations, Management.

Introduction

Uterine leiomyomata also called uterine fibroids or simply myoma is a benign tumour of the uterus, the commonest neoplasia of the female genital tract¹⁻⁵. It is estimated that about 20-30% of women over 30 years of age harbour this tumour although most are symptomless⁵⁻⁶. Several reports put the incidence between 50-70% of autopsy and hysterectomy specimens^{2,5-7}. In the tropics, it has been said that gynaecological operation list is not complete without the operation of uterine fibroids.

The causes of uterine fibroid remain largely unknown but several factors have been associated with it. It is commoner in the Negroid race than the Caucasians and the incidence is higher in nulliparous, infertile and obese women. Prolonged use of oral contraceptive pill and increasing number of term pregnancies protects against the development of uterine fibroid⁵⁻¹⁰.

Mode of management of uterine fibroids includes conventional and laparoscopic myomectomy and hysterectomy and uterine artery embolisation; while

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gonadotrophin releasing hormone agonist (GnRH agonist) is used to suppressed big fibroids before surgical intervention^{5,6,11,12}.

This retrospective study was designed to determine the incidence, clinical presentation and mode of management of uterine fibroids in Ife State Hospital, Ile-Ife, Osun State, Nigeria.

Methods

All cases of uterine fibroids over the ten years period from January 1st, 1999 to December 31st, 2008 were retrieved from Medical Records Department of Ife State Hospital, an arm of Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Nigeria. There were 328 patients operated for uterine fibroid but only the 320 histologically confirmed cases of uterine fibroid were used for the analysis. The case notes were studied and data related to the patients’ age, parity occupation, clinical features, mode of treatment and complications were collected and analysed. During the period under review, all the patients were admitted after obtaining a full history and physical examination. Various investigations were performed as indicated and different types of surgical treatment were used. Postoperative care was as usual for a major abdominal surgery.

Results

There were 4444 gynaecological admissions during the periods of study among which were 320 confirmed cases of uterine fibroid. This represents 7.20% of all gynaecological admissions. The age of the patient ranged from 23 to 51 years with a mean age of 35.0±1.6 years. The highest proportion of cases of uterine fibroids occurred in the age range of 30-39 years that accounted for 129[40.31%] of cases. Patients aged 30-49 years accounted for 217[67.81%] of the total.

The parity of the patients ranged from 0 to 7 with a mean parity of 2.4±1.3. Nullipara accounted for 77 (24.06%) of the cases and 61 (19.06%) were para1. Majority were para2 and below 192 (60.0%) while 42 (13.12%) were grandmultipara (para5 and above).

The presentations of cases of uterine fibroids are shown in table I. Most of the patients presented with multiple features while the commonest complaints were menstrual disturbances [66.88%], abdominal swelling [45%], abdominal pain [33.12%] and infertility [30%]. Other symptoms patients presented with were anaemia (packed cell volume <30%) [30%], recurrent abortion [24.69%], hypertension [16.56%] and dysmenorrhoea [11.88%]. Majority, 192[60%], of the patients presented with uterine sizes ranging from 12 to 20 weeks, 75[23.44%] presented with uterine sizes<12 weeks while uterine sizes ranging from >20 to 32 weeks formed 36[11.25%] of the cases and 17[5.31%] of the patients

had uterine sizes >32 weeks. The majority 263[82.19%] of patients in this series had multiple fibroids, the highest number being 24 fibroid nodules. The commonest site where the fibroid are located in this series was intramural [54.37%], sub serous [24.37%], sub mucous [18.12%] and in the broad and round ligaments [3.12%].

Table 1. Mode of presentation of patients with uterine fibroids at Ife State Hospital, Ile-Ife, Nigeria.

Presentation	Number	%
1 Menstrual abnormalities	214	66.88
- Menorrhagia	127	39.69
-Irregular menses	87	27.19
2 Lower abdominal swelling	144	45.00
3. Lower abdominal pain	106	33.12
4. Infertility	96	30.00
- Primary Infertility	65	20.31
-Secondary Infertility	31	9.69
5 Anaemia (PCV < 30%)	96	30.00
6 Recurrent abortions	79	24.69
7 Hypertension (blood pressure>140/90 mmHg)	53	16.56
8 Dysmenorrhoea	38	11.88

Table 2. Operations performed on the patients with uterine fibroids at Ife State Hospital, Ile-Ife, Nigeria.

Types of Operation	Number	%
1 Total Abdominal Hysterectomy with bilateral salpingo – Oophorectomy (TAH & BSO)	59	18.44
2 Total Abdominal Hysterectomy (TAH) only	33	10.31
3 TAH & Unilateral salpingo -Oophorectomy	10	3.12
4 Subtotal Hysterectomy only	5	1.56
5 Vaginal hysterectomy only	5	1.56
6 Abdominal myomectomy only	120	37.50
7 Myomectomy + Tuboplasty/ Adhesiolysis	62	19.38
8 Myomectomy + Unilateral Cystectomy	26	8.13

Table 3. Postoperative morbidity recorded in cases of uterine fibroids at Ife State Hospital, Ile-Ife, Nigeria.

Morbidity	Number	%
1 Pyrexia	32	10.00
2 Anaemia	26	8.12
3 Wound infection	17	5.32
4 Vault infection	1	0.3
5 Pelvic abscess	1	0.3
6 Wound dehiscence	1	0.3

The types of operative procedure performed were shown in table II. Hysterectomy was done in 112 (35.0%) cases while myomectomy was done in 208 (65.0%) cases.

The postoperative complications as shown in Table III, occurred in 78[24.37%], Pyrexia occurred in 32[10%] of cases while anaemia (packed cell volume of less than 30%) was recorded in 26[8.12%] of cases and blood transfusion was required in 22[6.87%] of cases.

The range of duration of postoperative hospital stay varied from 7-16 days with a mean of 8.7 days majority of the patients, 182[56.87%] stayed for eight days or less, 112[35%] stayed for between 10-14 days following surgery and 26[8.12%] cases stayed for more than 14 days. There was no death among the cases reviewed.

Discussion

In this review, uterine fibromyomata accounted for 7.20% of all gynaecological admissions during the period of study. This is a comparable figure with the reported prevalence of 7.8% and 8.3% from Zaria and Ilesa, Nigeria, respectively but less than that obtained in Ilorin and Jamaica 13.4% and 30% respectively.^{8,9,10}. This help to assess that burden of the disease is high in the community even thou the true incidence in the communities are unknown because majority of cases are asymptomatic^{1,5,10,13,14}.

The age distribution of the case studied in this series ranged from 23 to 51 with a mean age of 35.4 years. This finding is in agreement with the observation that majority of patients are found at any age after puberty^{3,9}. Among the Caucasians, uterine fibromyomata tend to occur around the age of 30 years⁵ and commonly cause symptoms between ages 35 and 45 years². Majority 67.5% of cases presented in the fourth and fifth decades of life; this confirms earlier observation^{5,9}. Though the reason for high incidence of fibromyomata in the fourth decade of life is speculative, the female sex hormones have been implicated in the aetiology^{4,5,8,15}.

Uterine fibroids have been known to be commoner in nulliparous or relatively infertile women^{2,5,7,10}. This study also agrees with earlier observation with low parity forming 60% while nullipara and primipara formed 43.12% of cases. The observation of a significant number of cases of multiparous women with uterine fibromyomata may be attributed to racial factor. Women of Negroid origin tend to develop fibromyomata despite having had children^{2,5}.

Often fibroids are symptomless and the clinical presentation is variable. The incidence of abnormal menstrual bleeding was 66.9% that is comparable to

70.4% reported in Zaria but more than 52.2% reported in Ilesa, Nigeria^{9,10}. The aetiology of increased uterine bleeding is not always clear but has been variously related to hyperplastic endometrium, increased vascularity of the uterus, and functional disturbance in the large oedematous ovaries often found in association with fibroids^{2,5}.

The occurrence of infertility (30%) in this review is less than that reported in Ilorin (56.1%) and Ilesa (50.7%)^{8,9}. Fibroids as a causal factor in infertility is still controversial as other factors are usually found at surgery which could account for infertility in most patients⁸. The sub mucous type may block the cornual ends of the uterus or prevent sperm transportation to the uterine tubes. However, more important is the frequent association of chronic pelvic inflammatory disease with fibroids as a cause of infertility^{3,16}.

The occurrence of recurrent abortions 24.69% in this series is in agreement with 23.0% reported by Emembolu⁸ but lower than 41% reported by Butram and Reiter¹⁶. This may be due to the fact that relationship between fibroid and abortion depends on some other unknown factors.

Hypertension was seen in 16.56% of the cases in this review. This is comparable with 15.5% reported in Ilesa¹⁰ but lower than 25.5% reported in Zaria⁹. Its occurrence may be related to the age of the patients.

Anaemia is a recognised complication of uterine fibroid^{4,5,6,9,10}. In this review 30% of cases were observed to have anaemia. The incidence of anaemia may be due to the fact that many of the patients in our environment already have other factors predisposing to anaemia such as malnutrition, malaria and hookworm infestations^{8,9}. Menorrhagia that was found in 39.69% of cases may then aggravate the already existing anaemic state.

Analysis of the uterine sizes at presentation showed that many of the patients pre-sented with large uterine sizes. In this review fibroid larger than 12 weeks gestation and above accounted for 76.56% of cases. This is probably due to the fact that patient presented late. Hysterectomy with or without removal of the tube and ovaries was performed in 34.99% of cases in this series, while myomectomy was done in 65.01%. The proportion of our cases that had myomectomy performed may be related to a concern for future pregnancy in the absence of any other pelvic diseases requiring hysterectomy. Where the fibroids are multiple and large and the women are nearing menopause and symptoms are considerable, hysterectomy is always a better choice^{8,9,10}. Simple hysterectomy with conservation of the ovaries that was done in 13.43% in

this review was probably to ensure that a state of artificial menopause was not prematurely induced in younger patients. Modern methods of medical and surgical treatment of fibroids such as the use of gonadotrophin releasing hormone agonist (GnRH agonist), uterine artery embolisation and laparoscopic or hysteroscopic myomectomy were not available in our unit during the period of review.

Post operative morbidity seen in this review was attributable to pyrexia (10%) and anaemia (8.12%). Post operative pyrexia in this review was as result of wound infection, vault infection and malaria infestation. Blood transfusion was required in 6.1% of the cases as result of blood loss and post operative anaemia. Late presentation of patients makes the fibroids to be huge and complicated with symptoms before they were diagnosed. It is advisable that women in the reproductive age group should be periodically examined to detect this growth earlier. This will prevent various complications recorded in this study.

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