GYNAECOLOGY

An Analysis Of Surgically Treated Cases Of Uterine Fibroid At The University Of Ilorin Teaching Hospital, Ilorin, Nigeria

A.W.O. Olatinwo and*R.A. Offiong

*Department of Obstetrics and Gynaecology, University of Ilorin Teaching Hospital (Matenrity Wing) Ilorin, Nigeria And *Gwagwalada Specialist Hospital, Gwagwalada, Abuja FCT.*

ABSTRACT

A 2½-year review of uterine fibroids management at the University of Ilorin Teaching Hospital was carried out. It was revealed that uterine fibroids constitute 4.7% of Gyneacological admissions. Nearly 50% of patients were within the 31-40 years age group and 54.1% occurred within the parity of 0 and1. Menstrual disturbances and infertility were the commonest presenting features. A palpable abdominal mass was a feature in 75.5% of the patients although only 43.8% complained of abdominal swelling. 64.3% showed evidence of associated pelvic inflammatory disease. The operative treatments involved either myomectomy (42.8%) or hysterectomy 57.2%. Postoperative morbidity due to pyrexia occurred in 60% while anaemia and wound infections were recorded in 11% and 10% respectively. The study revealed that pelvic infections are still very rampant in our environment and this may not be unrelated to ignorance, poverty and dearth of adequate health facilities in the community. ***(Nig J Surg Res 2000;2: 6-11)***

KEY WORDS: Uterine fibroid, symptomatology, surgical treatment, postoperative morbidity.

Introduction

Uterine fibroids are the commonest tumours of the uterus, occurring in 20-30% of women about the age of 30 years. [1,2] They are about 3 to 9 times more frequent in Nigeria than in Caucasian women.[3] Their precise aetiology is not known, but genetic factor have been implicated.[4,5] Other incriminated factors are familial, low fertility or infertility and hormones, particularly oestrogen which is believed to play a synergistic or facilitative role in their growth.[4,6]

Most uterine fibroids are slow growing but many produce symptoms if they attain a reasonable size, undergo degenerative changes, are strategically located or present in great numbers. Most frequently, the symptoms are related to heavy, painful and or irregular bleeding, pelvic discomfort, abdominal swelling or it may be associated with infertility.[4,5,7]

Management opinions for uterine fibroids depend on age, parity demonstrable tubal patency and desire to preserve fertility potential. Other factors are the size, number and locations of the fibroids, and associated findings of pelvic inflammatory disease, which is common in developing countries [8] and the unwillingness of some women to have their uterus removed. Hysterectomy remains a sensible, definite treatment for problematic uterine fibroids for women who have completed their family, have no cultural beliefs preventing the removal of their uterus or do not

Reprint requests to: Dr. A. W. O. Olatinwo, Department of Obstetrics and Gynaecology, University of Ilorin Teaching Hospital, Ilorin,

involves the use of Gonadotrophin-Releasing analogues (GnRH analog). The GnRH analogs create a pseudo-menopausal state in an attempt to reduce the size of uterine myomata.[9] They however, have the risk of regrowth when the drug is discontinued. The use of endoscopic surgical techniques and laser for myomectomy are also possible modes of treatment.[10] It is in the light of these trend in the management of uterine fibroid that this study was embarked upon. The aim of the study is to review the feature of uterine fibroids as well as management options in our environment.

Materials and Methods

This study was a retrospective one and was conducted at the Maternity Wing of the University of Ilorin Teaching Hospital, Ilorin, Nigeria over a 2.5 years period (June 1994 to December 1996). All patients who had myomectomy or hysterectomy for uterine fibroids were identified from the gynaecology admission and operation records of the hospital and their case notes retrieved and reviewed.

A total of 112 patients had myomectomy and hysterectomy for uterine fibroids during the study period of which 98 cases notes were available for review. The age, parity, marital status, clinical features, operative procedures and the morbidity have been analyzed.

Results

There were 2,372, gynaecological admissions during the period of study and 112 cases of uterine fibroids were diagnosed clinically within the same period and this accounted for 4,7% of gynaecological admissions.

The age range was 20-55 years (mean 36.5 years) (table 1) and majority of patients (48%) was aged 31-40 years. Majority of patients (89%) were married and only 6.1% single. The nulliparous and primiparous patients formed majority of the cases (54%)(Table 2). The presenting features are outlined in Table 3. Menorrhagia was the commonest presenting complaints, being present in 62% of patients. Forty nine percent had dysmenorrhoea while 11% had irregular menstrual bleeding. A palpable abdominal mass was present in 76% of patients but only 44^% complained of an abdominal swelling. Abdominal pain was a feature in 26% patients. Infertility was a feature in 52% and over two-thirds were secondary infertility. Recurrent abortion occurred in 11%. As shown in Table 4, evidence of pelvic inflammatory disease was present in 64% of patients. Pelvic adhesion alone was observed in 48%, 14% had hydrosalpinxes while 2% had tubo-ovarian masses.

Table 1: Age Distribution Of 98 Surgically Treated Cases Of Uterine Fibroids

Age (Years)	No. (%)
<20	1 (1.0)
21-30	25 (25.5)
31-40	47 (48.0)
41-50	22 (22.4)
>50	3 (3.1)
Total	98 (100)

Table 2: Parity Distribution Of 98 Surgically Treated Patients With Uterine Fibroids

Parity	No. (%)
0	31(31.6)
1	22(22.5)
2	6(6.1)
3	4(4.1)
4	7(7.1)
5 and above	28(28.6)
Total	98(100)

Table 3: Presenting Features In Surgically Treated Cases Of Uterine Fibroids

Features	No. (%)
Abdominal swelling	43(43.8)
Abdominal pain	25(25.5)
Abdominal discomfort (without pain)	15915.3)
Palpable abdominal Mass	74(75.5)
Menstrual disorders	
Menorrhagia	61(62.2)
Dysmenorrhoa	48(48.9)
Irregular bleeding	11(11.2)
Infertility	
Primary	15(15.3)
Secondary	36(36.7)
Recurrent abortion	11(11.2)
Urinary symptoms	10(10.2)
Anaemia (P.C.V. <30%)	25(25.5)
Hypertension (BP > 140/90mmHg)	20(20.4)

Table 4: Associated Pelvic Disease In 98 Surgically Treated Cases Of Uterine Fibroids

Evidence of Pelvic Inflammatory disease	No. (%)
Pelvic Adhesions alone	47(47.9)
Hydrosalpinxes	14(14.2)
Tubo-ovarian mass	2(2.0)
Others	
Unilateral ovarian cysts	11(11.2)
Polycystic ovaries	2(2.0)

Table 5: Operative Procedures In 98 Surgically Treated Cases Of Uterine Fibroids

Age(Years)	Myomectomy	Hysterectomy
<20	-	-
21-30	18	7
31-40	21	2.5
41-50	2	21
>50	-	3
Total (%)	42(42.8)	56(57.2)

Table 6: Post Operative Complications In 98 Surgical Treated Cases Of Uterine Fibroids

Complication	Type of Surgery		Total
	Myomectomy (%)	Hysterectomy (%)	(%)
Pyrexia	32 (55.2)	26 (44.8)	58 (59.1)
Anaemia	4 (36)	7 (64)	11 (11.2)
Wound infection	3 (30)	7 (70)	10 (10.2)
Wound Dehiscence	4 (57.1)	3 (42)	7 (7.1)
Urinary tract infection	2 (40)	3 (60)	5 (5.1)
Haemorrhage	1 (50)	1 (50)	2 (2.0)
Faecal fistula	-	1(100)	1 (1.0)
Acute renal failure	-	1(100)	1 (10)
Urinary retention	1 (100)	-	1 (10)
Secondary amenorrhoea	1 (100)	-	1 (10)
Pneumonia	-	1(100)	1 (10)

Table 5 shows operative procedure performed according to age. Ninety three percent of the patients who had myomectomy were aged 21 – 40 years and 50% were in the age group 31 – 40 years. Majority of hysterectomies (82%) were done in patients aged 31 – 50 years, 45% were aged 31 – 40 years while 38% were in the age group 41 – 50 years and 5% over 50 years.

Ninety one percent of patients who had myomectomy were of parity < 3 and 12% were nulliparous. No grandmultiparous women had myomectomy. Majority (50%) of hysterectomies were performed in women of parity 5 and above while 26% were in nulliparous or primiparous patients.

As shown in table 6, postoperative pyrexia occurred in 60% of patients while anaemia and wound infection occurred in 11% and 10% respectively.

Discussion

Uterine fibroids represent the most common pathological growth in the female reproductive tract. The true incidence of uterine fibroids in any community cannot be determined on the basis of hospital based studies alone[5,11,12] because a large percentage of uterine fibroids are asymptomatic. The number of women presenting in hospitals with uterine fibroids may therefore be just a tip of the iceberg. The incidence of uterine fibroids in this review is 4.7% of gynaecoligical admissions in our center.

The majority of uterine fibroids (71%) in this study occurred between the ages of 31 and 50years as in other reports. [2,13,14] Although Novak and Woodruff[15] documented that uterine are more common in single women, marital status does not appear to affect the incidence of the disease in the present report. Though majority of the women were married (89%), this may be a reflection of the general pattern of this demographic variable in the community.[16] Majority of the cases (54%) occurred in nulliparous and primiparous patients in this study and compares with the reported incidence in the black population. [2,11,13]

In this study, infertility was a feature in 52% of cases. Evidence of pelvic inflammatory disease was found in 48% and compares with results from other centers. [2,6,11] Of importance is the frequent association of chronic pelvic inflammatory disease with fibroids as a cause of infertility. [2,13] Whitfield [5] reported that abortion might occur in early pregnancy especially if implantation occurs over submucous fibroids. This study recorded a recurrent abortion rate of 11%. Anaemia was found to be present in 26% of the cases. This is not surprising given the high incidence of menorrhagia in our patients. Hypertension was a feature in 20% of patients in this study and as reported by others ,[2,14] this seems to be related more to the advancing age of the patients.

The definitive treatment of uterine fibroids, especially in the presence of significant pelvic inflammatory disease is hysterectomy since it prevents recurrence. In this report, myomectomies were performed in 43% of cases while hysterectomy were done in 57%. Myomectomies are quite commonly performed in this environment even when chances of reproductive functions are minimal or absent. [5,8] This is so because removal of the uterus is considered a serious mutilation and also the high importance women attach to their menses in the environment. This observation is in agreement with those of Osinusi [11] who noted that in this environment, myomectomy is the treatment of choice where the patient is young and desires to have more children and also because of the patients' psychological attachment to their menstrual function. Minimal invasive modalities of treatment of uterine fibroids are evolving and these have been tried in developed countries. These include the use of gonadotrophin releasing hormone analogues [9,10]

In combination with myomectomy to reduce the size and vascularity of the tumour and the use

of laparoscopic hysterectomy, which is superior to total abdominal hysterectomy in terms of less postoperative pain, hospital stay, faster recovery and sickness benefit.[17] These treatment modalities are unexplored in our environment at the present time.

Postoperative morbidity from pyrexia is common in tropical surgical practice [13] and may be attributed to malarial infestation, with reduced immune response [18] and to operative morbidity in most cases. [2] Anaemia was observed postoperatively in 11% of the patients and may be attributed to excessive bleeding during hysterectomy, especially in patients with extensive pelvic adhesions.

Conclusion

This study has shown that the peculiarities in presentation of patients with uterine fibroids in this environment have remained unchanged. This is and indication that pelvic infections are still very common in the environment and may not be unrelated to ignorance, poverty and a dearth of adequate health facilities in the community.

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References

1. Hassan f, Arumugan K, Sivanesartnam V. Uterine leiomyomata in pregnancy. Int J Gynaecol Obstet 1990; 34:413-416
2. Emembolu JO. Uterine fibromyomatas: presentation and management in northern Nigeria. Int J Gynaecol Obstet 1986; 25: 413-416
3. Sutton CJG. Treatment of large uterine fibroids. Br J Obstet Gynaecol 1996; 103: 494-496
4. Verkauf BS. Changing trends in treatment of leiomyomata uteri. Current Opinion in Obstetrics and Gynaecology. 1993; 5: 301-310
5. Whitfield CR. Benign tumours of the uterus. In: Whitfiels CR (ed) Dewhurst's textbook of Obstetrics and Gynaecology for postgraduates. Blackwell, London, 1995:436-440
6. Pinkerton JHM, Stewart DB. Uterine fibroids. In: Lawson JB, Stewart DB (eds). Obstetrics and Gynaecologyin the tropics and developing countries. Edward Arnold, London, 1983:385-397
7. Ololorin EO, Owade LJ, Ladipo OA. Results of myomectomy for infertility in Ibadan, Nigeria. Nig Med J 198; 19:173-175
8. Ogunbode O. Environmental factors in the management of uterine fibroids. Trop J Obstet Gynaecol 1981; 2:119-120
9. Andereyko JL, Marshall LA, Dumesic DA, Jaffe RB. Therapeutic uses of gonadotrophin releasing hormone analogues. Obstet Gynaecol Survey 1987; 42:11-12
10. Vollenhoren NJ, Lawrence AS, Healy DC. Uterine fibroids: a clinical review. Br J Obstet Gynaecol 1990; 97:285-298
11. Osinusi BO. Uterine fibroids in Nigerian women. Dokita 1972; 7:30-32
12. Lacey CG. Disorders of the uterine corpus. In: Current obstetric diagnosis and treatment. Lange, Los Angeles, 1982:245-250
13. Ezem BU, Otubu JA. Hysterectomy in the Hausa/Fulani population in Nigeria. Int J Obstet Gynaecol 1981; 19:145-148
14. Ogunniyi SO, Fasubaa OB. Uterine fibromyomata in Ilesha Nigeria. Nig Med Pract 1990; 19:145-148
15. Novak EA, Woodruff. Myomata and other benign tumours of the uterus. In: Novak's gynaecological and obstetric pathology. Saunders, Philadelphia, 1979; 260-279

16. Akingba JB. Some cultural and socio-economic influences on the practise of obstetric and gynaecology in Nigeria. In: Obstetric and gynaecology in developing countries. Proceedings of Society of Obstetricians and Gynaecologists of Nigeria Conference. 1977; 72-81

17. Rchardson RE, Magos Al. Laparoscopic hysterectomy. In: Studd J (ed) Progress in obstetrics and gynaecology. Churchill Livingstone, Edinburgh, 1996; 12: 355-378

18. Ajayi OO, Ihekwaba FN. Malaria in the postoperative patient. West Afr J Med 1983; 2:107-111