

Original Article

Uterine leiomyomata: a five year clinicopathological review in Zaria, Nigeria

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Abstract

Background: Uterine Leiomyomata (uterine fibroids) are common gynaecologic conditions affecting mainly women in the reproductive age group. Fibroids are associated with many other distressing gynaecologic conditions like menorrhagia, infertility, lower abdominal swelling and discomfort.

Methods: This is a retrospective clinicopathological analysis uterine leiomyomata a five-year period (1996 – 2000). The information required was retrieved from histology bench books and request cards.

Results: 209 cases were analysed, 62.7% from myomectomy 37.3% following hysterectomy. Younger patients opted for myomectomy possibly in order to allow them complete their family sizes. Uterine fibroids were commoner in the third to fourth decade of life. The nulliparous women to had a higher incidence of uterine fibroid (60.6%) in 71 cases analysed whose parity were known.

Lower abdominal swelling is the commonest presenting complaint (48.8%), followed by menorrhagia and infertility accounting for 35.4% and 30.6% respectively. Hyaline degeneration was the commonest degenerative change observed (57.9%). Three cases (1.4%) had necrosis. Nineteen cases were observed to be associated with other co-existing lesions, of which 52.6% occur with fibroid polyps. Adenomyosis accounted for 36.8% and one case each of metastatic carcinoma and interligamentary fibroids.

Adequate clinical information and brief surgical procedure on request cards were lacking in most cases.

Conclusion: Uterine fibroids are common conditions affecting women in their reproductive age group, which corresponds with economically viable age group. This condition is associated with significant morbidity and attention needs to be focused on it.

Key words: Uterine fibroids, parity, gynaecologic.

Introduction

Uterine leiomyomata (uterine fibroids) are not only the commonest tumour of the female genital tract, but also the commonest tumours in the whole body.¹⁻⁴ It is estimated that 20 – 25% of women over the age of 35 years have fibroids, the vast majority of which are asymptomatic.^{1, 2, 4, 6} Fibroids are 3 – 9 times commoner in Blacks than in Caucasians,³ and constitute 7.9% and 8.35% of gynaecological admissions in Zaria and Ilesha respectively.^{5, 7} The true incidence in the community is only speculative, as majority of cases are symptomless.^{1, 7, 8} The aetiology is precisely unknown, however the higher incidence in Blacks is thought to be due to the higher incidence of pelvic inflammatory disease in them.^{6, 9} Continuous oestradiol secretion uninterrupted by pregnancy has been adduced and there is evidence

that fibroid growth is oestrogen dependent and majority atrophy after menopause², thus the association between nulliparity and fibroids.^{2, 3, 6} Abdominal swelling and menstrual disturbances are common complaints.⁹ Fibroids as a cause of infertility is controversial.^{9, 10} Complications include torsion, haemorrhage, infection, sarcomatous and other degenerative change.^{2, 5, 11} This review documents the features of uterine fibroids in Zaria Northern Nigeria.

Materials and Method

This is five-year retrospective study. Uterine leiomyomata diagnosed at the Department of Pathology of the Ahmadu Bello University Teaching Hospital Zaria (1st January 1996 to 31st December 2000) were analysed.

Clinical data of patients with histological diagnosis of uterine leiomyomata were retrieved from the laboratory bench books and referral clinical notes. Information was analysed for age, parity, clinical presentation, mode of surgical treatment, histopathological changes. Slides were reviewed by at least a Histopathologist and a Senior Registrar in Histopathology. The data was analysed using Microsoft® Excel; frequency tables and figure were then generated.

Results

Two hundred and nine specimens were diagnosed as uterine leiomyomata during the study period. The age range was 25 – 50 years but the highest number (53.6%) of patients were in the age group 25-39 years. One hundred and thirty one patients had myomectomy with majority of the patients, 94(71.8%) in the 25 – 39 years age group. Seventy eight patients had hysterectomy with majority (73.1%) in the age range 40 years and above.. Adequate information on parity

was not specified in 138 cases and only 71 cases were analysed. . 60.6% of Uterine fibroids were in the nulliparous women. 14.1% were with parity 1 – 2 and 8.4% with parity 3 – 4. Most of the patients above parity five had a hysterectomy and accounted for 16.9% of fibroids. Presenting features in uterine fibroids shows lower abdominal swelling as the commonest complaint (48.8%), menorrhagia (35.4%), infertility (30.6%) and recurrent first trimester abortion accounted for the least incidence of 1.0%. In 15.8% of cases, clinical information was not sufficiently provided by the referring physician. When analysed for pathologic change in the leiomyoma, hyaline degeneration was encountered in 57.9%. Myxoid change (4.3%), cystic degeneration (7.2%), dystrophic calcification (6.2%), osteiod metaplasia (1.9%) and necrosis (1.4%) Uterine fibroids co-existing with other lesions were seen in 19 cases. Fibroid polyps (52.6%) were the commonest lesions. Others are adenomyosis (36.8%), metastatic carcinoma (5.3%) and interligamentary fibroids are seen in 5.3% of cases. (Table 1).

Table 1: Uterine fibroids with other lesions

Lesion	No (%)
Adenomyosis	7(36.8)
Metastatic carcinoma	1(5.3)
Fibroid polyps	10(52.6)
Interligamentary fibroids	1(5.3)
Total	19(100.0)

Table 2 Degenerative changes in fibroids

Changes	No. (%)
Hyaline	121(57.9)
Myxoid	9(4.3)
Cystic	15(7.2)
Calcification	13(6.2)
Osteiod metaplasia	4(1.9)
Necrosis	3(1.4)
No change	56(26.8)

Discussion

A total of two hundred and nine cases were reviewed during the five year study period. Uterine fibroids accounted for 2.2% of all surgical specimens submitted to the Department of Pathology during the five year study period. Majority of the patients (62.7%) had myomectomy, while 37.3% had hysterectomy. Ninety four patients (71.8%) that opted for myomectomy were in the age range 25 – 39 years, while 71 patients (91.0%) that had hysterectomy were aged 35 years and above. This shows that younger women who have not completed their family opted for myomectomy and the older women opted for hysterectomy. Previous studies from Nigeria showed that uterine fibroids are commoner in the third to fourth decades of life^{5,7} In this study it was noted that nulliparous women have a higher incidence of uterine fibroids, accounting for 60.6% of cases. Earlier reports from Nigeria other parts of the world have shown that the incidence of uterine fibroids decreases with increasing parity.^{2, 4, 5, 7} Information on patients parity was not adequate on cards and not sufficient to make useful conclusions.

One hundred and two patients (48.8%) presented with lower abdominal swelling, 35.4% with menorrhagia and 30.6% with infertility. Association of infertility with uterine fibroids has been attributed partly to the frequent association of chronic pelvic inflammatory disease with leiomyoma.^{5, 7} Late presentation by patients has been associated with higher incidence of degenerative changes.⁷ In this study, degenerative changes showed hyaline degeneration being the commonest accounting for 57.9% of cases. Myxoid degeneration accounted for 4.3%, cystic degeneration 7.2%, dystrophic calcification 6.2%, while osteoid metaplasia and necrosis accounted for 1.9% and 1.4% respectively. There was no noticeable change in 26.8% of cases. Necrosis observed in this study might be due to the pressure effect on the expanding lesion.

In nineteen cases there was a co-existing lesion, with 52.6% due to a fibroid polyp. Adenomyosis accounted for 36.8%, there was one case each of metastatic carcinoma and interligamentary fibroids. This calls for greater caution during the pathological examination of a fibroid specimen.

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