

## Leiomyoma of Breast: Comparative Study of Age Incidence in Different Countries

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### Abstract

Four cases of leiomyoma of the breast are reported from an Ethnic Group in Nigeria, West Africa. Being aged 32-45 years (mean 40) this pattern differed from the 47-53 years (mean 49) collected from 6 single cases published from Nepal, Canada, Italy, Japan, Brazil, and Turkey. It is concluded that the age parameter and other manifestations may prove epidemiologically significant when fully documented worldwide.

**KEYWORDS:** Breast, leiomyoma, age, epidemiology.

**Introduction:** Leiomyomas are smooth muscle benign tumors that are usually described as being extremely common in the uterus. In striking contrast, its rarity in the breast is such that a few single case reported could be obtained from such widely scattered countries as Nepal,<sup>1</sup> Canada,<sup>2</sup> Italy,<sup>3</sup> Japan,<sup>4</sup> Brazil,<sup>5</sup> and Turkey.<sup>6</sup> The epidemiology of age patterns stood out and are therefore reported.

**Materials and methods:** The objective of the present report is to gain useful insight by adding four Nigerian cases to the literature. In particular, the patients are from the large Ethnic Group called the Ibos or Igbos.<sup>7</sup> In this connection, the Igbos bore the brunt of the Nigerian Civil War. Following the cessation of the War, a Reference Pathology Laboratory serving this group began to receive biopsy material from February 20, 1970. The present 30-year series ended on February 19, 2000. Four cases were found and are summarized in Table I.

**Discussion:** The above cited papers<sup>1-6</sup> have discussed such issues as the rarity of the lesion, the earliest date of its recognition, the subareolar or deep parenchymatous site of its origin, its treatment by complete excision, and the controversial nature of its histogenesis.

A contrasting aspect of the present work emerged as the age range of the sufferers. The four Nigerian patients were aged between 32 and 45 years (mean 40), whereas the literature series was between 47 and 53 (mean 49) years. Perhaps, larger series will throw more light on the epidemiologic significance of age patterns. Thus, as British workers intimated,<sup>8</sup> an accumulated histopathology data pool can provide sufficient materials for epidemiologic analysis.

It is of interest that the Turkish patient<sup>6</sup> exhibited not only parenchymatous breast

leiomyoma but also previously operated uterine leiomyoma. This brings to mind whether the two organs suffer alike in terms of age presentation. On the basis of our local community,<sup>9</sup> Table 2 shows that the peak age in both sites is the 40-49 year bracket. Perhaps, if such comparisons are carried out world-wide, significant epidemiologic findings may emerge.

**Table I. Case summary**

No.	Name	Age (yr)	Side	Complaint	Duration	Clinical Diagnosis	Size (cm)
1.	E.B.	32	L	Lump	8 months	Fibroadenoma	6
2.	N.L.	42	L	Lump	7 days	Fibroadenoma	4
3.	N.C.	42	L	Lump	7 days	Fibroadenoma	4
4.	U.P.	45	L	Mass	2 years	Cancer	9

**Table 2. The age incidence of leiomyomas in Igbos according to organs.**

Age group (yr)	Uterus	Breast
- 19	2	-
20 - 29	48	-
30 - 39	124	1
40 - 49	186	3
50 - 59	51	-
60 - 69	11	-
70 -	1	-
Totals	423	4

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