The Epidemiology of Neurofibroma in Infancy and Childhood among Nigerian Igbos

Wilson IB Onuigbo*

Department of Pathology, Medical Foundation and Clinic, Enugu, Nigeria

*Corresponding author: Wilson IB Onuigbo, Department of Pathology, Medical Foundation and Clinic, Enugu, Nigeria, Tel: +2348037208680; E-mail: wilson.onuigbo@gmail.com

Received date: November 10, 2016; Accepted date: January 11, 2017; Published date: January 18, 2017

Abstract

Background: The neurofibroma has been defined as a fibroma composed of “nervous and connective tissue” and held to have been first used in 1892. Moreover, an illustrated book without a figure defined it alike. Furthermore, a weighty tome also explained this similarly. Hence, what are the epidemiological features? The answer is based on a UK group that considered the use of a histopathology data pool in its analysis.

Materials and Methods: This paper contributes with personal experiences obtained among an Ethnic Group in Nigeria using a Reference Pathology Laboratory in which I was the pioneer pathologist from 1970 to 2010.

Results: It was remarkable that, up to 5 years, males predominated in consonance with the Igbo mothers’ preference for sons; as regards females the oldest teenage group was prominent in accord with their noted trend to seek attractiveness.

Conclusion: This paper gives the epidemiological features of neurofibroma among the Igbo ethnic group domiciled in a developing community.

Keywords: Neurofibroma; Epidemiology; Age; Sex distribution; Igbos

Introduction

According to Merriam-Webster's Collegiate Dictionary [1], neurofibroma means “a fibroma composed of nervous and connective tissue.” It was held to have been first used in 1892. Moreover, an illustrated textbook contained, without giving a figure, the same description [2]. Furthermore, a practical textbook held the same view [3].

In this context, what are the epidemiological perspectives? Now, there is a strongly canvassed opinion that a histopathology data pool is useful in epidemiological analysis [4]. Therefore, this paper's contributions are based on such a pool which started functioning under me.

Materials and Methods

The Government of the Eastern Region of Nigeria started a Reference Pathology Laboratory at Enugu in 1963. However, it began functioning anew only in 1970 after the cessation of the Civil War in 1970 with me as the pioneer pathologist. This favorable establishment was boosted largely by my insistence on submitting formalin fixed specimens with printed Request Forms containing essential data. The materials proved useful as vantage points in the pursuit of epidemiological data, the present one being on the neurofibroma among the Igbos whose anthropology was written nicely by a foreigner [5].

Results

These are tabulated thus:

| Age | M | F | Total |
|-----|---|---|-------|
| 0-5 | 13 | 3 | 16    |
| 6-10| 6  | 9  | 15    |
| 11-15| 10 | 8  | 18    |
| 16-19| 5  | 10 | 15    |
| Total| 34 | 30 | 64    |

Table 1: Epidemiological data on Igbos with neurofibroma.
Discussion

Did the book on the Igbos throw light on the observed epidemiological trends? I think so. For one thing, it is recorded that "one of the most pleasing characteristics of the Ibos is the bond at affection between mother and son." This is borne out in (Table 1). For another thing, this Table also shows the prominence of the older female teenagers. This is compatible with another Igbo pattern, namely, the urge to increase attractiveness. Accordingly, any blemishes such as another thing, this Table also shows the prominence of the older female teenagers. This is compatible with another Igbo pattern, namely, the urge to increase attractiveness. Accordingly, any blemishes such as facial neurofibromas would make the patients to present at hospitals.

In terms of the biopsies, the accurate diagnosis of neurofibroma itself came short with only 23.4%. This figure contrasts strongly with the wave of odd diagnoses such as "pulpy toc"! Significantly, most of the patients attended the well-established Orthopedic Hospital and Teaching Hospital. The Missionary Hospitals also stood out unlike other hospitals.

On the world stage, a rare case was accompanied by chronic otosrroea [6]. I encountered a similar mass in a 13-year-old boy with tip of nose mass. Concerning the foot, a patient exhibited pain due to tender mass in the medial aspect of her left foot [7]. This precise demonstration was not required in my case of a 14-year-old girl submitted as “Swelling (R) ankle.” With regard to the salivary glands, of which there were 17 cases reported by Schuller and McCabe [8], the distribution was as follows: Parotids [9-12]; Submandibular, sublingual, and minor salivary gland, 1 each. The local series were all parotid in position which was apparent in 3 Cases (Figure 1), shows the salivary gland and abutting neurofibroma with the diagnostic neuroid body which is arrowed.

![Figure 1: The arrow points to a neuroid body within neurofibroma abutting on salivary gland.](image)

Table 2: Distribution according to sites.

| Site     | Number |
|----------|--------|
| Head     | 28     |
| Neck     | 5      |
| Chest    | 6      |
| Abdomen  | 5      |
| Upper limb | 6    |
| Lower limb | 13    |
| Penis    | 1      |
| Total    | 64     |

Conclusion

This paper gives a bird's eye view of the neurofibroma in this community. In sum, the male: female ratio was almost equal. However, males preponderated during the first 5 years, thereby exhibiting the love noted for ages to exist between mother and son! On the other hand, since our females usually opt for physical well-being and attractiveness, they themselves apply for cosmetic operations. A quarter of the doctors did diagnose these lesions correctly. The neonates numbered more than the rest. Finally, the National Orthopaedic Hospital and the University Teaching Hospital were mostly the curative centers sought for these lesions of the nerves. The Missionary Hospitals also offered the attractive option. Of the regions of the body, the head stood out by involving 29 persons; out of these the scalp predominated with as many as 10 cases, thereby constituting the top most site of presentation. I am not aware of any significance attachable to it, thereby being a subject for future studies.

References

1. Merriam -Webster's Collegiate Dictionary. 11th Edition, Merriam-Webster, Inc, Massachusetts, USA p: 419.
2. Wheater PR, Burkitt HG, Stevens A, Lowe JS (1985) Basic Histopathology. A Colour Atlas and Text. Churchill Livingstone, London.
3. Russell RCG, Williams NS, Bulstrode CJK (2000) Bailey & Love's Short Practice of Surgery. 23rd edition, London: Arnold p: 152.
4. Macartney JC, Rollaston TR, Codling BW (1980) Use of a histopathology data pool for epidemiological analysis. J Clin Pathol 33: 351-353.
5. Basden GT (1966) Niger Ibos. Cass, London.
6. Rajesh A, Fahmy F, Mukhtyar B (2015) A rare case of solitary mastoid antrum neurofibroma in a child presenting with chronic otorrhea. Eur J Paediat Neurol 19: S91.
7. Mirkich AL, Bornstein GB, Bancroft LW (2013) Neurofibroma causing tarsal tunnel syndrome. Orthopedics 36: 154-157.
8. Schuller DE, Mc Cabe BF (1977) Salivary gland neoplasms in children. Otolaryngol Clin North Am 10: 399-412.
9. Onuigbo WI (2006) Epidemiology of skin cancer arisen from the burn scars in Nigerian Ibos. Burns 32: 602-604.
10. Onuigbo WI (2015) Epidemiologic analysis of the surgical specimens of breast carcinosarcomas examined at a Reference Laboratory in a Nigerian Community. Surg Res 1: 25-27.

11. Onuigbo WIB (2015) Comparative epidemiology of breast carcinoma in Swedish and Nigerian women under 30 years of age. J Women's Health Care 4: 279.

12. Onuigbo WIB (2016) Comparative approach to the epidemiology of Wilms Tumor. Archives in Can Res 4:1.