

# Adult Osteomyelitis in a Developing Community

Wilson I. B. Onuigbo

*Received: 14 December 2016 Accepted: 2 January 2017 Published: 15 January 2017*

---

## Abstract

Osteomyelitis, which means bone marrow inflammation, has been known since antiquity. However, it is still a current challenge. Accordingly, its epidemiology has been studied worldwide. For example, from USA has come a case series. In like manner, the present series comes from a developing community consisting of the Ibos or Igbos, an ethnic group domiciled mostly in South-eastern Nigeria. The study was stimulated by the affirmation of a Birmingham (UK) group that the establishment of a histopathology data pool facilitates epidemiological analysis. The present pool is a Reference Pathology Laboratory. It was striking that, among the 24 patients documented, the males were more often involved than females. Other parameters featured singly such as that the 3rd Decade was the commonest for both sexes.

---

**Index terms**— bone, inflammation, osteomyelitis, epidemiology, developing community.

Adult Osteomyelitis in a Developing Community Wilson I. B. Onuigbo Abstract-Osteomyelitis, which means bone marrow inflammation, has been known since antiquity. However, it is still a current challenge. Accordingly, its epidemiology has been studied worldwide. For example, from USA has come a case series. In like manner, the present series comes from a developing community consisting of the Ibos or Igbos, an ethnic group domiciled mostly in South-eastern Nigeria. The study was stimulated by the affirmation of a Birmingham (UK) group that the establishment of a histopathology data pool facilitates epidemiological analysis. The present pool is a Reference Pathology Laboratory. It was striking that, among the 24 patients documented, the males were more often involved than females. Other parameters featured singly such as that the 3rd Decade was the commonest for both sexes.

## 1 Keywords:

bone, inflammation, osteomyelitis, epidemiology, developing community.

## 2 I. Introduction

In the words of Lew and Waldrogl (1), "Known since antiquity, osteomyelitis is a difficult-to-treat infection characterized by the progressive destruction and new apposition of bone." From Brazil (2), there is the report that, over the last 30 years, "the pathogenesis of osteomyelitis has almost been totally elucidated, and many factors responsible for the persistence of this infection have been identified." Indeed, the view from Columbia (3) is the same over the past four decades. In general, the establishment of the histopathology data pool has facilitated epidemiological analysis (4). Therefore, with regard to an Ethnic Group, the Ibos or Igbos (5), who are domiciled in South-eastern Nigeria, the present paper deals with their own analysis.

## 3 II. Investigation

From the end of the Nigerian Civil war in 1970, physicians began to send to me numerous formalin-fixed specimens. They were submitted with standard clinical details until the 1990s. Accordingly, the osteomyelitis data were carefully assembled with reference to epidemiological analysis, especially as regards the adults.

## 4 III. Results

Table 1 summarize the local data. At first glance, only the earliest 2 cases were from outside the capital city, Enugu. Unfortunately, the named doctor was a German who died after performing the autopsy on an unrecognized case of Lassa fever. Incidentally, he Author: Department of Pathology, Medical Foundation and Clinic, 8 Nsukka Lane, Enugu 400001, Nigeria. e-mail: wilson.onuigbo@gmail.com lived long enough to have sent to me many cases of teenage appendicitis (6). The rest of the doctors operated in the National Orthopedic Hospital, Enugu, where Dr. Osisioma held the pride of place as the saying goes! Table 2 shows that the males preponderated over the females in the ratio of almost 3 to 1. It also shows that the 3rd decade was the commonest for both sexes.

Table 3 reveals the sites affected. Clearly, the bones of the lower extremities were most commonly affected.

Regarding the duration of the illness before the attendance at the hospital, two patients boldly attested to the duration of 50 and 54 years respectively. Three old people generalized that the lesions started during childhood. Up to 9 patients admitted to the duration of only up to 1 year. For 8 patients, it was up to 2 years.

## 5 IV. Discussion

For years, it has become clear that the prevention of bone infections is most important, including the prevention of infection after surgery (6). Of course, case series are needed (7). In this context, retrospective study is well worth it as in that of Gallaher's group (8). As they concluded, "Daptomycin appears to be an effective therapeutic choice with an acceptable safety profile in the management of osteomyelitis that does not involve hardware." Of course, these comments pertain readily to developed communities.<sup>1</sup>

1

The ball

[Note: C]

Figure 1: Table 1 :

2

	Male	Female	Total
21 -30	7	3	10
31 -40	2	0	2
41 -50	3	1	4
51 -60	4	2	6
61+	1	1	2
Total	17	7	24

Figure 2: Table 2 :

58

<sup>1</sup>© 2017 Global Journals Inc. (US)Year 2017

---

**3**

Site	No.
Tibia	6
Femur	4
Humerus	4
Fibula	2
Ilium	2
Spine	2
Rib	2
Maleolus	1
Finger	1
Total	24

Figure 3: Table 3 :



- 
- 59 [Basden and Niger Ibos ()] , G T Basden , Niger Ibos . 1966. Cass, London.
- 60 [Lew et al. ()] , D P Lew , F A Waldvogel , Osteomyelitis . 10.1056/NEJM199704033361406. *N Engl J Med* 1997.
- 61 336 p. 999.
- 62 [Gallagher et al. ()] ‘Daptomycin therapy for osteomyelitis: A retrospective study’. J C Gallagher , A Huntington
- 63 , D Culshaw . 10.1186/1471-2334-12-133. *BMC Infect Dis* 2012. 12 p. 133.
- 64 [Calhoun et al. ()] ‘Osteomyelitis of the long bone’. J H Calhoun , M M Manring , M Shirtliff . doi: 1055/s-0029-
- 65 1214158. *Semin Plast Surg* 2009. 23 (2) p. .
- 66 [Jorge et al. ()] ‘Osteomyelitis: A current challenge’. L S Jorge , A G Chueire , Arb Rossit . *Braz J Infect Dis*
- 67 2010. 14 p. 3.
- 68 [Norden ()] ‘Prevention of bone and joint infections’. C W Norden . *Am J Med* 1985. 78 p. . (suppl 6B)
- 69 [Frainow ()] ‘Systemic antimicrobial therapy in osteomyelitis’. H S Frainow . 10.1055/s-0029-1214161. *Semin*
- 70 *Plast Surg* 2009. 23 (2) p. .
- 71 [Macartney et al. ()] ‘Use of a histopathology data pool for epidemiological analysis’. J C Macartney , T P
- 72 Rollaston , B W Codling . *J Clin Pathol* 1980. 33 p. .