

# Pulmonary Edema in Forensic Autopsy in a Developing Community

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## Abstract

Forensic autopsy is required in obscure deaths. In a documented experience, pulmonary edema featured among other pathologies. Therefore, this paper documents the examples of such edema found among an Ethnic Group domiciled largely in South Eastern Nigeria. It was commoner in males and preponderated in the 21–30 age group.

**Keywords:** Sudden death; Autopsy; Lungs; Edema; Age; Sex; Igbos

## Introduction

The importance of autopsy in forensic cases is well established (1). In the publication from Barbados (2), pulmonary edema featured. Therefore, this paper reports the author's findings among his ethnic group, the Ibo or Igbos (3), who are domiciled mainly in South Eastern Nigeria.

## Investigation

Going by the injunction of a Birmingham (UK) group that the establishment of a histopathology data pool facilitates epidemiological analysis (4), the author as the pioneer pathologist at the Regional Pathology Laboratory at Enugu, the then Capital of Eastern Nigeria, was able to collect data from 1970. The reports were archived personally thereby facilitating manual investigation. The results are deemed to be worthy of publication.

## Typical Case Report

IP, a 27-year-old man, was found dead on the riverside,

where he was apparently washing after farming. On post mortem by Dr Everts of Joint Hospital, Ikom, there was some pericardial effusion but the heart looked normal while the lungs were somewhat bloody. The organs were selected and submitted to me at the Regional Pathology Laboratory. On microscopy, I reported thus: "The lung shows edema with numerous 'heart failure cells'." The heart was unremarkable while the liver, kidney and spleen exhibited acute congestion.

## General Results

Age	Male	Female	Total
<10	3	1	4
11 – 20	0	6	6
21 – 30	13	6	19
31 – 40	3	2	5
41 – 50	5	0	5
50+	1	0	1
Total	25	15	40

Table 1: Age and sex distribution patterns.

## Discussion

A glance at this Table reveals two major trends. Firstly, males outnumbered females in the ratio of 5:3. Secondly, the 21-30 age groups preponderated. Accordingly, it is surprising that the old cohort showed up only as a 56-year-old man. Perhaps, family members bear the deaths occurring among the aged but worry about what must caused it in the young!

Worldwide interest exists in the field of pulmonary edema in forensic autopsy cases. A Japanese group dealt with the molecular pathology after trauma (5), and also after extreme ambient temperature (6). Other spheres of interest have included acute methadone poisoning (7), Enterovirus 71 (8), and triathletes immersion (9).

## Conclusion

The above literature findings are a far cry from what obtained in the local community. For instance, the question of "informed consent," may arise. Regarding it, I have written on it elsewhere (10,11). Incidentally, it does not apply to the present paper. This is because the main data were obtained from the Request Forms accompanying the specimens submitted from distant clinics whose individual practices regarding disclosure of potential conflicts of interest were never included!

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