Larvae of Strongyloides stercoralis in the Venous Blood of a 25 Year Old Female Patient at the National Hospital, Abuja Nigeria

I Peletiri, N Ibecheozor, L Moses, K Iregbu

INTRODUCTION

A 25 year-old female patient with a history of recurrent pruritus, particularly especially in the evenings over the course of about six years, was seen at the Family Medicine Clinic, National Hospital, Abuja Nigeria in April, 2008. Both diurnal and nocturnal blood samples of the patient were analyzed using 2% formalin water and stained with 1% Giemsa stain for 30 minutes. The result was an unusual occurrence. While the diurnal samples had microfilariae of Mansonella species, the nocturnal samples in addition to microfilariae of Mansonella species also had larvae of Strongyloides stercoralis. This paper is to draw the attention of practicing biomedical scientists of unusual results while processing specimens in our laboratories.

METHOD FOR EXAMINATION OF HAEMOLYSED VENOUS BLOOD

COLLECTION OF BLOOD

2 ml of both diurnal and nocturnal venous blood samples were collected from the patient into 2% sodium citrate solution. While the diurnal sample was collected at about 12:00 noon (10:00-2:00pm), the nocturnal sample was collected at about 10:00 pm (10:00pm – 2:00am).

RESULT

Both the diurnal and nocturnal blood samples had microfilariae of Mansonella species. The nocturnal blood sample also had larvae of Strongyloides stercoralis.
DISCUSSION

The presence of Strongyloides stercoralis in blood is an unusual occurrence. Repeated blood sample collection corresponded with initial blood sample result. During hyperinfection, filariform larvae may gain access to the arterial circulation, thereby allowing dissemination to numerous tissues and solid organs. Infact, filariform larvae have been recovered from biopsies of lymph nodes\(^1\), endocardium\(^2\), pancreas\(^3\), liver\(^2\), kidney\(^4\), and brain \(^5\). In 1991, Onuigbo and Ibeachum\(^6\) reported encountering a case of Strongyloides stercoralis larvae in peripheral blood.

It is interesting to note that repeated examination of this patient’s faecal samples had no larvae of Strongyloides stercoralis or any other parasite.

This case report is to draw the attention of practicing biomedical scientists and other medical researchers of unusual results while processing specimens in our laboratories.

References

Author Information

I.C. Peletiri
Dept. of Medical Microbiology & Parasitology, National Hospital

N.K.O. Ibecheozor
Dept. of Medical Microbiology & Parasitology, National Hospital

L.A. Moses
Dept. of Family Medicine, National Hospital

K.C. Iregbu
Dept. of Medical Microbiology & Parasitology, National Hospital