

[Available Issues](#) | [Japanese](#)

Author: [ADVANCED](#) | Volume Page

Keyword:



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > **Abstract**

Tropical Medicine and Health

Vol. 36 (2008) , No. 1 p.17

Serum Levels of anti-BCG, Albumin and Packed Cell White Blood Cell Count in Subjects with HIV and Morbidity

[Chinedum Charles Onyenekwe](#)¹⁾, [Nkiruka Ukibe](#)¹⁾, [Samuel Chukw](#)
[Michael Ezeani](#)³⁾, [Ngozi Ofiaeli](#)⁴⁾, [Anthony Onochie](#)⁵⁾, [Amobi Ilika](#)⁶⁾
[Nancy Aboh](#)²⁾ and [Prince Ele](#)²⁾

1) Department of Chemical Pathology

2) Department of Human Biochemistry

3) Department of Immunology

4) VCT unit

5) HIV unit Nnamdi Azikiwe University Teaching Hospital

6) Department of Community Medicine, College of Health Sciences
University

(Accepted January 16, 2008)

Abstract: The present study was designed to determine anti-BCG

packed cell volume, white blood cell count and malaria parasite density in subjects in a malaria endemic area with stable transmission. For this study, 75 subjects aged between 17 and 70 years (females=45; males=30) were enlisted. The study included: (i) HIV/AIDS subjects (n=21) on anti-retroviral therapy (ART), 12 of whom had malaria co-infection; (ii) HIV seropositive subjects (n=29) not on ART and 12 with malaria co-infection, and (iii) HIV seronegative control subjects (n=25) without malaria co-infection. Serum albumin, anti-BCG and PCV, WBC and haematocrit were determined in all participants. The results showed that detectable anti-BCG, but the titre was lowest in HIV/AIDS on ART subjects compared to HIV seropositives and control subjects ($F=16.878$; $p<0.001$). The rest of the parameters (serum albumin (g/l) was significantly different among the HIV seropositive and control subjects ($F=8.043$; $p<0.001$). This pattern was also true for PCV ($F=16.878$; $p<0.001$). When the above parameters were considered for subjects with malaria co-infection, a similar pattern of results was observed. There was no significant difference between those with or without malaria for the respective groups except for WBC count which was significantly reduced in HIV/AIDS subjects with malaria, compared to those without malaria. The positive association between WBC count and malaria was consistent in all groups. The present study thus indicates that, although prior exposure to bacterial infection, serum anti-BCG, serum albumin and haematocrit were impaired by HIV infection even in cases of malaria co-morbidity in

Key words: [Malaria](#), [HIV/AIDS](#), [BCG](#), [PCV](#), [Albumin](#)

[\[PDF \(44K\)\]](#) [\[References\]](#)

Download

To cite this article:

Chinedum Charles Onyenekwe, Nkiruka Ukibe, Samuel Chukwue Ezeani, Ngozi Ofiaeli, Anthony Onochie, Amobi Ilika, Martins Ifeazueze, Prince Ele: "Serum Levels of anti-BCG, Albumin and Packed Cell Cell Count in Subjects with HIV and Malaria Co-morbidity". *Trop J Parasitol* Vol. **36**, pp.17-22 (2008) .