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The effect of HIV/AIDS and malaria co-infection on clinical and haematological parameters**Ndabong Michael**

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Some degree of interaction has been demonstrated recently between HIV/AIDS and falciparum malaria co-infection in studies carried out in certain parts of Africa, although with conflicting results. However, not much has been done in Cameroon. In order to investigate the interaction, a clinical and laboratory study was carried out in the urban town of Yaoundé the capital city of Cameroon on 480 subjects (15-49 years of age) from March – September, 2015. Information on the knowledge of practices and attitudes towards both infections was also obtained. Analysis of the questionnaire indicated that participants generally had poor knowledge on HIV and malaria. The prevalence of malaria, HIV and co-infection was 78.8%, 11.7% and 7.9% respectively. The mean temperature of co-infected patients (37.5 ± 0.007) was higher compared with that of patients infected with HIV (36.7 ± 0.13). Co-infected patients were significantly more anaemic ($t=2.275$, $p=0.026$) and had low red blood cell counts ($t=-2.681$, $p=0.001$) than those with mono-infections. The mean parasite density was higher in co-infected patients (1630.97 ± 231.02) when compared with patients solely diagnosed with malaria (1217.44 ± 67.07) ($\chi^2=7.65$, $p=0.0251$). WBC count was lower in co-infected patients compared with patients infected with malaria or HIV only ($\chi^2=2.24$, $p=0.488$). The mean CD4 count in co-infected subjects (317.94 ± 45.00 cells/mm³) was lower than in those having HIV only (321.37 ± 24.63 cells/mm³), but this difference was not statistically significant ($t=-1.521$, $p=0.265$). The follow-up mean CD4 count (350.11 ± 30.34) in co-infected patients increased compared with the initial count (31.6 ± 17.82) ($\chi^2=-1.613$, $p=0.069$). The mean parasite density ($109.09 \pm 41.08/\mu\text{l}$) for co-infected patients after follow-up was significantly lower than the initial value ($1630.79 \pm 23.102/\mu\text{l}$) ($t=6.12$, $p<0.001$). Therefore HIV and malaria co-infection in the study site was generally associated with anaemia, high fever, high parasite density, lower RBC and WBC count and reduced CD4 counts.

Biography

Ndabong Michael is a fourth year medical student at the University of Buea and currently carrying out research work on HIV/AIDS in West Africa.

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