

ANTISPOROZOITE ANTIBODIES IN TWO POPULATIONS SUBMITTED TO DIFFERENT LEVELS OF MALARIA TRANSMISSION

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RESUME

Since 1988 an entomological, parasitological and serological study of malaria is being performed at two different sites in the South of Cameroon where transmission levels of malaria are different. We wanted to study the relationship between malaria transmission and antisporezoite antibodies in the different age groups of two populations.

First the population of the quarter BILALANG, on the border of the river Sanaga in the town of Edéa. Antivectorial measures were taken and a medical centre supplies free antimalarial medication. The annual rate of infected bites is below 5.

Secondly the population of MBEBE, a village in the rainforest on the border of the river Sanaga. There is no doctor and no pharmacy. The annual rate of infected bites is 198.

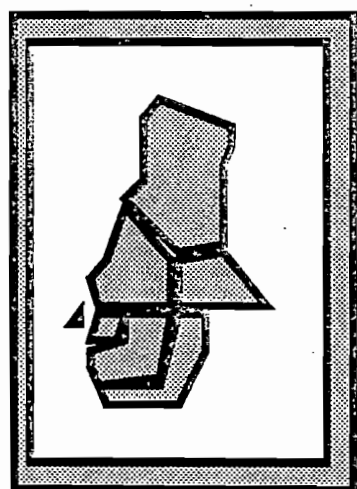
Five surveys were carried out in two years. Antisporezoite antibodies against *P. falciparum* were detected using an ELISA test.

The comparison of the optical densities shows that in the village of Mbebe the levels of antibodies are higher than in the quarter of Bilalang, in comparable age groups. The maximum level of antibodies is higher in the high transmission area and this level is reached at a younger age.

These findings could be explained by the difference in transmission intensity, which lead to different stimulation of the immune system.¹

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OCEAC

**RESUMES DES COMMUNICATIONS PRESENTEES
A LA 16ème CONFERENCE TECHNIQUE DE L'OCEAC**

Yaoundé 12 au 16 Novembre 1990

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