

Is malaria in Africa also becoming drug-resistant?

25 April is World Malaria Day.

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Dit is de omschrijving

In 2016, the ITM first encountered five travellers with malaria who suffered a recurrence following treatment with Artemether-lumefantrine, a combination of two medicines that forms a standard treatment against malaria in European travellers who have visited Africa. The travellers all recovered following treatment with a different medicine.

The failure of the treatment with Artemether-lumefantrine raises the question whether the parasite that causes malaria is becoming resistant to one of the two components. Drug-resistance against artemisinin derivatives is a known and growing problem in Asia, but resistant malaria has not been confirmed yet in Africa.

The clinicians and biomedical specialists at the Institute are therefore joining forces in the search for a conclusive answer to the question why the treatment did not work in the five patients in question. In the laboratory, ITM scientists are examining patient samples for traces of resistance to the malaria parasite.

“Of course it is possible that the treatment failed due to poor absorption of the medication, for example due to patients not following the dietary instructions. Resistance studies in our laboratory examine whether malaria exhibits resistance to the medication. Any such resistant malaria would be a worrying first for Africa,” according to Dr Ula Maniewski.

The Institute expects to be able to present the first results of the resistance studies in the course of 2017.

Prof. Colin Sutherland - of the London School of Tropical Medicine in the United Kingdom - first raised the alarm at the end of January 2017. Sutherland and his colleagues published [results about four British travellers](#) who had been to Africa and suffered a recurrence following standard treatment.

Prof. Sutherland found certain mutations that indicate resistance, the significance of which is not clear yet, but which could point to resistance: *“As people in African countries where malaria is endemic are repeatedly exposed, it is much more difficult to confirm the failure of a treatment there. After all, it could be a new infection. For this reason, the role of travellers from non-endemic areas is so important.”*