

c Odyssean malaria in Gauteng Province

On 26 September 2014, the Outbreak Response Unit was notified of a case of malaria at South Rand Hospital, Gauteng Province. The patient, a 7-year-old girl, presented to hospital on 21 September 2014 with a short history of fever and sore throat. There was no history of recent travel to a malaria-endemic area. A diagnosis of tonsillitis was reached, and she was treated with antibiotics and analgesics and discharged home. The patient's condition worsened and she returned to hospital two days later presenting with fever, sore throat, diarrhea and vomiting.

The initial diagnosis on admission was acute gastroenteritis; she was hospitalised and received treatment. Laboratory findings included a decreased platelet count of $17 \times 10^9/L$. An astute laboratory technologist noted the presence of malaria parasites on a routine haematology differential smear. *P. falciparum* was confirmed on malaria smear. Unfortunately, the patient died before malaria treatment was commenced.

An entomological investigation was conducted at the case-patient's residence and surrounds. All mosquitoes captured were identified as *Culex* spp.; *Anopheles* spp. mosquitoes were not found at any of the sites sampled.

This is an example of an unusual malaria case in a non-endemic area due to importation of infected mosquitoes from endemic areas. The transmission of malaria outside endemic areas is usually unexpected, resulting in delayed diagnosis and treatment, and is therefore often associated with severe illness or a fatal outcome. It is likely that road traffic arriving from endemic areas in and

around South Africa is the source of most of the infected mosquitoes responsible for odyssean malaria cases. Healthcare workers need to maintain a high index of suspicion for malaria in all patients presenting with fever $>38^{\circ}C$, headache and flu-like illness, or fever $>38^{\circ}C$ with impaired consciousness where no obvious cause is evident, and in whom no recent history of travel to a malaria area is forthcoming.

A single negative malaria test does not exclude malaria. If clinical suspicion for malaria is high and the first test negative, repeat tests every 12-24 hours until the patient is better or an alternative diagnosis is confirmed. Low platelets that are otherwise unexplained may indicate the possibility of malaria. Malaria is a notifiable medical condition and must be reported to local health authorities.

The malaria season in South Africa typically extends from September to May each year. Cases of both local and imported disease can be expected, especially as travellers return from malaria endemic areas around this period. The malaria-endemic provinces within South Africa are KwaZulu-Natal (north-eastern part), Mpumalanga and Limpopo. Neighbouring countries such as Zimbabwe and Mozambique also have malaria-endemic areas and are an important source of imported malaria into South Africa.

Source: Division of Public Health Surveillance and Response NICD-NHLS; Malaria Control Program, National and Provincial Department of Health