

A review of 15 years of cryptic malaria in the United Kingdom

Parisha Katwa¹, Peter Chiodini^{1,2}, Philip Veal¹, Sophie Leinster¹, Hilary Kirkbride¹

¹ UK Health Security Agency, ² London School of Hygiene and Tropical Medicine

Background

Autochthonous malaria has not been observed in the United Kingdom since 1953. Nearly all UK malaria cases are imported from a malaria-endemic region. Cryptic malaria cases where there is no relevant travel history are rare in the UK, making up less than 1% of cases since 2000, and are investigated according to published national guidance.

Methods

We reviewed 15 years of cryptic malaria investigations in the UK between 2010 and 2024. Case summaries based on completed UKHSA cryptic malaria questionnaires and Malaria Reference Laboratory data were collated and analysed. Cases' mode of acquisition was classified as possible (limited evidence), probable (strong evidence) or confirmed (direct evidence).

Results

Fifteen cases of cryptic malaria (11 *Plasmodium falciparum*, 3 *P. ovale* and one *P. malariae*) were reported in the UK between 2010 and 2024, with the highest annual total of 6 cases in 2024. All but one were reported in South England, with the majority in London.

Eight *P. falciparum* cases were classified as possible importation of infected mosquitoes, one probable recrudescence in a semi-immune person due to pregnancy, one probable transfusion-transmitted malaria due to *P. malariae*, three co-travellers who acquired an acute *P. ovale* infection in another country, and no clear sources were identified for the remaining two cases. Autochthonous transmission was excluded in all cases.

Conclusion

Thorough investigation of possible cryptic malaria cases is essential in identifying potential sources of infection, and to ensure accurate and timely surveillance, which is vital to detect and prevent autochthonous malaria in the UK.