

Documents

T, R.^a, C, D.^b, A, R.^a, JC, Y.^{c d}

Nine years of imported malaria in a teaching hospital in Belgium: Demographics, clinical characteristics, and outcomes

(2024) *Diagnostic Microbiology and Infectious Disease*, 108 (4), art. no. 116206, .

DOI: 10.1016/j.diagmicrobio.2024.116206

^a Epidemiology and Biostatistics Unit, Institut de Recherche Expérimentale et Clinique (IREC), Université Catholique de Louvain, Brussels, Belgium

^b Clinton Health Access Initiative, Inc., Boston, MA, United States

^c Department of Internal Medicine and Infectious Diseases, Cliniques Universitaires Saint-Luc, Université Catholique de Louvain, Brussels, Belgium

^d Institut de Recherche Expérimentale et Clinique (IREC), Université Catholique de Louvain, Brussels, Belgium

Abstract

Background: Imported malaria is often misdiagnosed due to the aspecific symptoms and lack of familiarity among clinicians. This study aims to evaluate a decade-long trend of imported malaria cases in a Belgian teaching hospital by analyzing demographics, clinical characteristics, and outcomes. Methods: Medical records of 223 patients with confirmed malaria diagnoses between 2010 and 2019 were analyzed. Results: Most patients were male (63.2%), aged 18-65 years (77.1%), and visiting friends or relatives (40.8%). Central Africa was the most common travel destination (54.3%), and 63.7% did not take prophylaxis. Symptoms were flu-like, with fever (91.9%) being most prevalent. *P. falciparum* was identified in 88.3% of cases. A high proportion of severe cases (41.7%) and a low mortality rate (0.9%) were recorded. A severe form of the disease is associated with a more extended hospital stay than uncomplicated form (median of 5 vs. 4 days, $p < 0.001$). Thirty-five-point five percent [33/93] of patients with severe malaria have had a previous malaria infection compared to 50.8% [66/130] of uncomplicated patients ($p = 0.013$) which was statistically significant. Conclusion: Malaria disproportionately affects VFRs traveling to Central Africa, and flu-like symptoms should raise suspicion. Prophylaxis is essential to prevent the disease, and early diagnosis is critical for effective management. A severe form of the disease is associated with a more extended hospital stay than uncomplicated form and people with a previous history of malaria have a less severe disease © 2024

Author Keywords

Belgium; Diagnosis; Fever; Imported malaria; Malaria; Retrospective study; Severe malaria; Travellers VFR

Index Keywords

artesunate, atovaquone, clindamycin, doxycycline, proguanil, quinine, antimalarial agent; adolescent, adult, age distribution, aged, Article, Belgium, Central Africa, child, clinical feature, controlled study, demography, disease severity, disease transmission, early diagnosis, female, flu like syndrome, human, incidence, infection prevention, length of stay, major clinical study, malaria, malaria falciparum, male, mortality rate, nonhuman, outcome assessment, *Plasmodium falciparum*, retrospective study, sex difference, teaching hospital, travel, trend study, Belgium, demography, malaria, malaria falciparum, teaching hospital; Antimalarials, Belgium, Demography, Female, Hospitals, Teaching, Humans, Malaria, Malaria, Falciparum, Male, Travel

Correspondence Address

JC Y., Department of Internal Medicine and Infectious Diseases, Belgium; email: jean.yombi@uclouvain.be

Publisher: Elsevier Inc.

ISSN: 07328893

CODEN: DMIDD

PubMed ID: 38335879

Language of Original Document: English

Abbreviated Source Title: Diagn. Microbiol. Infect. Dis.

2-s2.0-85184893121

Document Type: Article

Publication Stage: Final

Source: Scopus