Tropical parasitic diseases and immunosuppression

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Despite substantial progress in control in endemic settings, tropical parasitic diseases such as malaria, leishmaniasis and American trypanosomiasis (Chagas disease) continue to affect millions of people worldwide [1–3]. In addition to representing a long-lasting burden in tropical countries, in recent decades these conditions have become a challenge for clinicians in non-endemic settings, as a result of increasing travel and migration [4–6]. Finally, the increasing number of immunocompromised individuals in tropical environments—international travellers or local populations of emerging economies with immunosuppressive conditions or treatment—makes the global picture even more complex [7,8]. Indeed, the multiple and reciprocal interactions between parasites and immunity are still to be fully elucidated, and the impact of immunosuppression not only on infection rate and clinical presentation, but also on the management and even global epidemiology of parasitic diseases, is being better recognized, with the specific issue of drug–drug interactions increasingly addressed in recent research.

This themed issue of Clinical Microbiology and Infection is aimed at appraising the current knowledge and newly identified gaps in the epidemiology and management of three major tropical parasitic diseases among immunosuppressed individuals. First, although malaria may seem to be less associated with immunosuppression (except in patients with asplenia [9]), Van Geertruyden describes the multiple, complex and mutual epidemiological and clinical interactions between this condition and the human immunodeficiency virus (HIV) epidemic in sub-Saharan Africa (Van Geertruyden, Clin Microbial Infect, April 2014), as it has been also observed in HIV-infected travellers [10,11]. In the second article, van Griensven et al. comprehensively review the clinical and therapeutic impact of various immunosuppressive conditions on leishmaniasis in different epidemiological contexts, such as HIV infection in East Africa or immunomodulating agents in Europe (van Griensven et al., Clin Microbial Infect, April 2014). Finally, Lattes and Lasala share their experience in preventing and treating Chagas disease in the growing population of South American immunosuppressed individuals (Lattes and Lasala, Clin Microbiol Infect, April 2014). Hopefully, readers will become aware that the recent trends in mobility, aging and susceptibility of the global population open new challenging chapters in the long history of human–parasite confrontation.

Transparency Declaration

The author has no conflict of interest related to the present article.

References