

Conclusions: In countries endemic to the disease, the use of imaging was able to diagnose and provide key information about disease progression and management. Imaging is an important tool for risk stratification and management caused by schistosomiasis. This systematic review on imaging evaluation on genitourinary schistosomiasis will strengthen the current body of knowledge. Findings can be translated into clinical recommendations that can improve risk stratification and management of this genitourinary disease.

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***Dientamoeba fragilis* Infection; Clinical and Treatment Evaluation**

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Background: *Dientamoeba fragilis* (DF), a gastrointestinal protozoa, has been an emerging pathogen since the introduction of new Multiplex PCR stool tests. This parasite is associated with gastrointestinal symptoms, yet its pathogenicity is still controversial.

Objectives: To assess the clinical aspects, and treatment response, of all patients positive for DF by PCR who were seen in our center.

Methods: All symptomatic patients with stool PCR positive for DF alone (or co-infected with *Blastocystis* spp) during 2017 - 2022 were included.

Clinical data are presented for all. Treatment regimen was given according to the treating physician decisions. Response to treatment was evaluated in patients who repeated post-treatment second molecular stool test. Clinical cure was defined as resolution of symptoms following treatment course. Molecular response was defined as PCR result for DF following any of the treatment courses. Clinical and molecular response was evaluated about one month following treatment course

Results: During the study period 106 patients were eligible, 52.8% were female. In 47.2% the infection was acquired in relation to international travel. Adult population (83%) has a median age 39 years old, while pediatric population has a median age of 8.5 years old. 98.1% had gastro-intestinal (GI) symptoms, 72.6% loose stools, 72.6% abdominal pain and 45.3% bloating.

Extra-intestinal complaints were observed including fatigue (46.2%), eosinophilia (14.2%), pruritus-ani (8.5%), and perianal rash (5.7%),

122 treatment courses with clinical responses and 95 with molecular responses were recorded.

Clinical cure with nitroimidazoles-based regimen achieved in 22.1% vs. 78.2% by paromomycin treatment ($p < 0.0001$). Molecular cure rate was 14.6% in nitroimidazoles-based regimen vs. 90.5% after paromomycin-treatment ($p < 0.0001$). Clinical cure was strongly associated with molecular eradication of the parasite, occurred in 97.6%, while only occurred in 9.1% with molecular failure ($p < 0.0001$).

Conclusions: Our results support DF as being pathogenic protozoa since there was a correlation between DF eradication and clinical cure. DF should be considered in cases of persistent abdominal symptoms, and in addition is causing extra-intestinal symptoms, unusual in other GI protozoa infection. Paromomycin should be the preferred treatment option.

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Influence of Host Nutriome on Immunological Control of *Leishmania* Infection

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Background: Immunologic control of parasitic infections arises from a combination of humoral and cellular mechanisms, both of which may be influenced by host nutritional status. Micronutrient depletion or over-repletion impairs the functioning of the immune system, potentially resulting in increased susceptibility to and poor immunologic control of protozoal infections.

Objectives: We aim to synthesize the knowledge surrounding the interplay between host micronutrient status and *Leishmania* infections. Leishmaniasis is a tissue-dwelling parasitic infection in which disease severity is determined by the host's immune system. Research suggests that acquired

factors such as nutritional inadequacies play a significant role in immunosuppression and enhanced pathogenicity.

Methods: Five electronic databases were searched with combinations of search terms from database inception to March 2022. A total of 9,814 articles were retrieved; after a deduplication step 7,828 articles remained. Screening remains ongoing and has been performed independently by two reviewers with discrepancies arbitrated by a tertiary reviewer. Currently, 206 articles have been full text screened leaving 12 eligible for final inclusion. Following screening, a comprehensive bias assessment will be carried out using the GRADE approach.

Results: Interim findings suggest that malnourished individuals are at greater risk of acquiring a significant leishmanial infection. Deficiencies reported to impact the disease severity and parasitologic parameters include malnourishment in general, as well as deficiencies in vitamin A, zinc (n=3 each), iron (n=2), fiber, vitamin E, potassium, selenium, and copper (n=1 each). Disruptions to white blood cell count (n=3), and antibody levels (n=1) were also noted.

Conclusions: The data will be summarized to systematically map published literature that will illuminate several ways in which nutrient deficiencies or abnormal micronutrient status alter and impair immune function in persons with leishmaniasis. This synthesized body of information will ultimately inform adjunctive therapeutic decisions in the context of leishmaniasis, which has the potential to improve patient prognosis.

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Knowledge of Travel Medicine among Medicals Students and Lecturers who Attended the Hubert Kairuki Memorial University 2022 Convocation

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Background: Travel medicine is an evolving field of medicine due to globalization and increased movement of people across the globe, from developed to developing and vice versa for varying reasons. It is dynamic and multidisciplinary. Tanzania attracts travellers but there is insufficient data on the knowledge of travel medicine especially in the medical field. We aimed to assess the awareness of medical students and lecturers about travel medicine among the attendees of the Hubert Kairuki Memorial University convocation where there was a talk about travel medicine.

Objectives: This study aimed to assess the awareness of Travel medicine among medical students and lecturers at Hubert Kairuki Memorial University.

Methods: We conducted a cross sectional study at Hubert Kairuki Memorial University, among the attendees of the 2022 convocation; lecturers and medical students. We used a google form sent via mail. We collected the data from 26th December 2022 to the 4th January 2023. All participants of Hubert Kairuki Memorial University convocation who agreed to voluntarily submit to the questionnaire. We excluded a second form filled by the same participant.

Results: 39 persons replied to the google form, one form was excluded because filled by the same participant.

30 participants were medical students (76.9%) and 9 lecturers (23.1%).

The age group was between 19 and 52 years.

21 participants (53.8%) only heard about it at convocation and 36 participants (87.2%) have never been to a travel clinic.

There is a huge interest in learning more of which 38 participants (97.4%) were interested in learning more about travel medicine.

Conclusions: There is low awareness of travel medicine but majority are interested to learn more about it.

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Investigation of a Cluster of Autochthonous Malaria at Frankfurt International Airport, Summer 2022