

Schistosomiasis among Travelers and the Foreign-Born Immigrants from Endemic Regions to Developed Countries: Descriptive Analysis

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Introduction: With a transmission facilitated by agrarian occupation in polluted freshwater of a tropical climate, schistosomiasis is an uncommon disease in geographical areas with advanced public health resources. However, an ever-increasing wave of migration from the socio-economically deprived communities to the developed world and the availability of cheaper but safe modalities of transportation for recreational travelers have led to an upsurge in the importation of many tropical diseases.

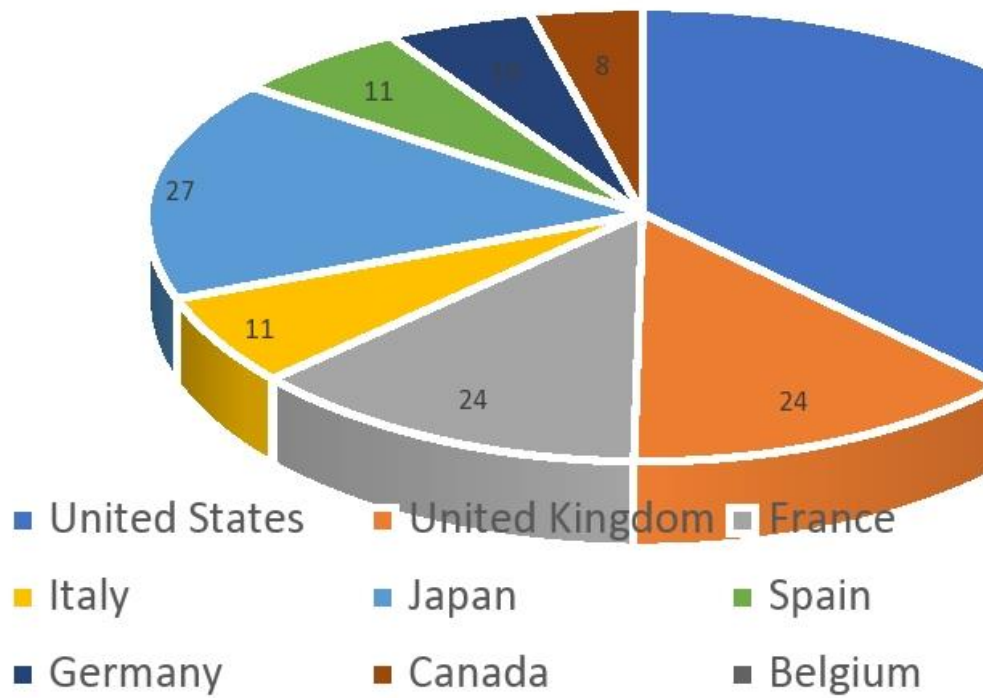
Methods: We selected case reports and short case series (1970-2022) published in developed countries on imported variants of schistosomiasis using the automated filtering device of the PubMed and Embase search platforms.

Results: There was a parallel increase in the importation of Schistosomiasis with the volume of immigration and recreational travel (Fig. 1). Katayama fever is the major manifestation among travelers. Bladder disease was predominant in young adult male immigrants (Fig. 3). Due to delayed diagnosis, prolonged duration of asymptomatic hepato-intestinal illnesses was frequently complicated by life-threatening portal hypertension in immigrants of the older age group. Acute appendicitis and gangrenous perforation exclusively occurred in immigrants. *S japonicum* was most frequent in the oldest age category and associated with an advanced malignancy. Acute dramatic respiratory illness as in Loeffler's syndrome was observed in travelers while asymptomatic lung disease mimicking tuberculosis was predominant among immigrants (Fig. 3). Bronchoscopy and lung biopsies which are not readily available in endemic countries are the basis for a confirmatory diagnosis in most immigrants. Cerebral disease of both hemispheres (88% vs. 25%) and cervicothoracic spinal disease with a potential for respiratory failure or quadriplegia were more common in travelers.

Conclusion: An awareness of the hotspots in developed nations provides an opportunity for early diagnosis, universal health screening, and empirical mass chemotherapy in new immigrants from endemic regions. Health education of recreational travelers to endemic zones may reduce the increasing trend of new infections in the developed world.

Fig 1: Number of schistosomiasis publications per country of Residence

Number of Publications per Country of Residence



**Figure 3: Frequency of O
Parasite Infection among I
Case Reports/ Cae Se**

