Disclosures. All authors: No reported disclosures.

436. A survey of Schistosomiasis and Strongyloidiasis Among Eritrean Immigrants to Israel
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Background. Immigration from east Africa (mainly Eritrea) to Israel peaked during 2011–2013. Little is known about the prevalence of chronic parasitic diseases in this population. We performed a survey of Schistosomiasis and Strongyloidiasis among immigrants, both are parasites that can cause chronic infections, and can lead to significant morbidity and complications.

Methods. A prospective survey of adults (>18 years) from Eritrea was performed at a primary care clinic for immigrants in Tel Aviv, Israel. Participants provided written informed consent. Stool and blood samples were collected, and participants filled epidemiological and clinical questionnaires. Stool was tested by real time PCR for Strongyloides stercoralis and Schistosoma species, serum was tested for IgG antibodies against these pathogens using commercial kits (WB, LDBio Diagnostic for schistosoma, ELISA, SciMedx for Strongyloides).

Results. A total of 106 patients were included in the survey; 85% were males and 15% females, median age was 34 (IQR 30-39) years, and median duration living in Israel was 7 years (IQR 6–9). Serology was positive in 55/106 (52%) for Schistosoma spp. and in 1/106 (1%) for Strongyloides. Stool PCR for Schistosoma was positive in 34 of 106 (32%), and uniformly negative for Strongyloides. Risk factors for positive schistosoma serology and PCR were male gender and younger age. Other factors such as duration of residency in Israel, being in other countries along the way to Israel, self-reported swimming in fresh water reservoirs and symptoms such as diarrhea, abdominal pain, and blood in stool were not significantly associated with Schistosoma infection.

Conclusion. We found high rate of Schistosomiasis (both by serology and PCR in stool) among Eritrean immigrants in Israel. While serology can remain positive for many years after there are no longer living parasites, high rates of positive stool PCR suggest current active infection. In contrary, chronic Strongyloides was rarely detected. Empirical treatment of schistosomiasis with praziquantel should be considered for immigrants from Eritrea.

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437. Spatial Distribution of Schistosomiasis After Repeated Praziquantel Treatments in a Rural Community in Brazil
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Background. Schistosomiasis is to a degree a disease of contact with fecally contaminated surface waters, rather than ingestion. Repeated treatments with praziquantel reduce schistosomiasis prevalence and morbidity; however, transmission persists and prevalence of infection often recover within a few years.

Methods. In a community in rural Bahia, Brazil that straddles a shallow river, we surveyed and treated all individuals that tested positive for schistosomiasis by Kato in stools in 2009, 2012, 2013, 2015, and 2017. Upstream and downstream, as well as communities upstream of the village, where human fecal water contamination is increased. Targeting sanitation in key areas may decrease sources of transmission persistence after cessation of community-wide treatment efforts.

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438. Finding Toxocara Eggs in Park Soil From Montgomery County, Pennsylvania
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Background. Toxocara canis (dogs) and Toxocara cati (cats) is a parasitic worm commonly called roundworm. Toxocara eggs are spherical to oblong in shape, have a rough/pitted edge, appear brownish in color, and measure 75–90 μm (T. canis) and 65–70 μm (T. cati). This environmental surveillance study was designed to examine Toxocara contamination levels of selected parks in Montgomery County, Pennsylvania for the first time.

Methods. Six soil samples (2 cups each) were obtained from six different parks, for a total of 36 samples. Two table spoons of dried/sifted soil were added to a glass, covered with 1/4 cup of a sugar flotation solution, stirred for 30 seconds, and let sit for 1 hour. The supernatant was transferred to a 20 mL plastic tube, capped, and let sit overnight. Three drops of surface fluid were placed on a glass slide and examined at ×400 total magnification. The number of Toxocara eggs from a full grid search of the cover slip area was recorded.

Results. Overall, 35 of 36 samples tested positive for Toxocara eggs. The parks and samples varied in their levels of contamination of Toxocara eggs; smallest samples (0 and 2 eggs) from Sanatoga Park and largest samples from Pottstown Memorial Park [52 eggs – picnic pavilion] and Heaven Place Park [56 eggs – tree grove]. The average number of eggs from Sanatoga Park (2.5 eggs [95% CI: 1.0, 4.0]), Gerald Richards Park (4.0 eggs [95% CI: 3.8, 6.2]), and Althouse Arboretum (4.7 eggs [95% CI: 3.3, 6.1]) were significantly lower than Manderch Park (11.7 eggs [95% CI: 9.6, 13.8]), Sanatoga, Gerald Richards, and Heaven Place had similar average number of eggs (χ² = 3.97 < 5.99). Pottstown Memorial Park (18.2 eggs [95% CI: 4.1, 32.1]) and Heaven Place Park (18.5 eggs [95% CI: 3.5, 23.5]) had the highest averages, both parks had very similar average number of eggs (χ² = 0.02 < 3.84).

Conclusion. This study demonstrated that Toxocara eggs could be found in every park that was tested. The number of eggs per sampled varied greatly; highest amounts in parks that could contain food droppings (e.g., picnic area) or potential bathrooms for dogs (e.g., tree grove). Some parks were significantly less infected with an average number of Toxocara eggs than other parks.

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439. Impact of Pre-Travel Consultation on Clinical Management and Outcomes of Traveler’s Diarrhea
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Background. International travelers are at high risk of acquiring traveler’s diarrhea. Pre-travel consultation has been associated with lower rates of infections. The objective was to study the impact of pre-travel consultation on clinical management and outcomes of traveler’s diarrhea.

Methods. This retrospective cohort study analyzed 1,160 patients diagnosed with traveler’s diarrhea at Mayo Clinic Rochester, Minnesota from 1994 to 2017. Variables included high-risk activities, post-travel care utilization, antimicrobial prescriptions, hospitalizations, and complications. Travelers were divided into those who sought (n = 256) and did not seek (n = 904) pre-travel consultation.

Results. Pre-travel consultation was associated with more post-travel infectious disease (ID) consultation [OR 3.2 (95% CI 1.9–5.4)], more stool sampling [OR 1.6 (95% CI 1.1–2.4)], and more antimicrobial prescriptions [OR 1.6 (95% CI 1.04–2.4)] compared with the non-pre-travel consultation group. The pre-travel consultation group had shorter hospital stays (adjusted mean 1.8 days for pre-travel vs. 3.3 days for non-pre-travel consultation group, P = 0.01) and reduced gastroenterology consultation rates (OR 0.2 [95% CI 0.06–0.97]).

Conclusion. Pre-travel and ID consultation may have facilitated appropriate management of traveler’s diarrhea, which reduced duration of hospitalization and gastroenterology consultation for prolonged or severe symptoms. These results support the important role of the ID physician in managing traveler’s diarrhea.

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440. The Masqueraders Presenting a Multisystem Disease: Unusual and Atypical Clinical Features of Scrub Typhus in Fukushima, Japan
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Background. Scrub typhus (ST), also known as Oriental tick typhus, is an acute, febrile illness spread by the bite of infected trombiculid ticks. It is widely distributed in Asia, Africa, the Americas, and Australia. The diagnosis is often overlooked or mistaken for other infectious diseases. The infection is characterized by sudden onset of high fever, chills, headache, myalgia, vomiting, diarrhea, conjunctival suffusion, and rashes. A variety of presentation is observed in the literature, and the differential diagnosis may be challenging. This case report was aimed to describe a unique presentation of ST in a 66-year-old man from Fukushima, Japan.

Methods. A 66-year-old man was admitted to our hospital with a 4-week history of recurrent high fever, headache, myalgia, and dizziness. A 13-year-old male presented with similar symptoms in a neighboring village, but the laboratory results were negative for ST. The patient had no history of tick bite or travel to tick-endemic areas. The patient initially presented to a neurological outpatient clinic with the diagnosis of Bell’s palsy. The first skin biopsy showed atrophic changes, but a second biopsy showed no evidence of malignancy. The second blood test for ST yielded positive results, and the patient was treated for ST. After the exacerbation of fever and dizziness, the third blood test revealed negative results. A CT scan of the brain showed multiple enhancing lesions, and he was referred to our hospital for further evaluation.

Results. The patient presented with a high fever, headache, myalgia, and dizziness. His initial symptoms were attributed to Bell’s palsy. The CT scan of the brain revealed multiple enhancing lesions, and he was referred to our hospital for further evaluation.

Conclusion. The patient’s presentation was unusual and atypical for ST. The patient initially presented with symptoms attributed to Bell’s palsy, but the CT scan of the brain revealed multiple enhancing lesions. This case report highlights the importance of considering ST in the differential diagnosis of patients with atypical presentations. The patient was treated with doxycycline, and his symptoms improved significantly. The patient was discharged with improved symptoms and a negative blood test for ST. The patient’s presentation was unusual and atypical for ST. The patient initially presented with symptoms attributed to Bell’s palsy, but the CT scan of the brain revealed multiple enhancing lesions. This case report highlights the importance of considering ST in the differential diagnosis of patients with atypical presentations.