Increasing number of imported parasitoses related to migrants in Parma (Italy) during 2014-2017

Adriana Calderaro*, Giovanna Piccolo†, Sara Montecchini†, Mirko Buttrini†, Sabina Rossi†, Maria Loretana Dell'anna†, Marco Maria Antonaci†, Valeria De Remigis†, Maria Cristina Arcangeletti†, Flora De Conto†, Carlo Chezzi†

†University of Parma, Department of Medicine and Surgery, Parma,

Background: Parasitic infections, once considered phenomena confined to tropics, are now being diagnosed with increasing frequency in industrialised countries because of various factors: increased travels to the developing countries, intensive immigration flows and international child adoption. This study reports the investigation of “imported parasitoses” related to migrants (malaria, intestinal parasitoses, schistosomiasis, filariasis) in Parma, Emilia-Romagna, a non-endemic setting, during 2014-2017.

Materials/methods: 354 blood samples from 208 subjects with suspicion of malaria were subjected to diagnostic method to detect plasmodia. 2270 faecal samples from 1135 subjects with suspicion of intestinal parasitosis were submitted to diagnostic methods to detect helminths/protozoa. 338 urine samples from 267 subjects with suspicion of schistosomiasis were submitted to diagnostic methods to detect/count ova.

Results: During 2014-2017, 113 cases of imported parasitosis in foreigners have been observed: 59 with malaria, 1 with filariasis (Loa Loa), 14 with imported intestinal parasitosis (11 Schistosoma mansoni, 3 Hymenolepis nana), 39 with urogenital schistosomiasis. 7 cases of Entamoeba histolytica infection (ubiquitous parasite, but most commonly found in tropical areas) were also observed.

Conclusions: Regarding migrant health, besides the health checks mandatory in Italy for some years, in Emilia-Romagna a Public Health Office has established a special care service called “Immigrant Health Space”, to which such patients can address in case of clinical manifestations or pathologies. The study shows that imported parasitoses in Parma increased (prevalence of malaria from 20% in 2000 to 25.4% in 2017; 39 urogenital and 11 intestinal schistosomiasis during 2014-2017 compared with only 17 and 1, respectively, during 2002-2013; 7 cases of E.histolytica infection during 2014-2017 compared with 18 during the previous 12 years; 1 case of filariasis during 2014-2017 compared with only 2 in the previous 12 years) as a result of the increase in the number of “forced migrants” coming in recent years in addition to travelers to tropics, migrants visiting friends/relatives in their origin country, as previously observed. Malaria continues to be the most commonly imported disease in Parma as well as throughout Italy and Europe. These results stimulate physicians working in non-endemic areas in suspecting imported parasitoses and in using appropriate diagnostic tools in parasitological diagnosis.