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Abstract (poster session)

Epidemiology of intestinal parasitoses in a tertiary-care hospital in Italy: a five-year study

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Objectives. The epidemiology of intestinal parasitoses in Europe is underestimated since they are usually not notified. The aim of this study was to describe the occurrence of parasitic intestinal infections in our area, as detected in patients (hospitalised or outpatients) with the suspicion of intestinal parasitosis whose faecal samples were sent to our laboratory during the period 2006-2010. **Methods.** Faecal samples (15,722) belonging to 8,886 patients (3,969 males, 4,917 females; 6,512 adults, 1,819 paediatric patients, 555 age unknown; 7,087 Italian, 1,799 subjects from developing countries) were subjected to macroscopic and microscopic examination according to standard procedures to search for the presence of helminths (adult/larval stages, ova) and protozoa (trophozoites, cysts), to an immunochromatographic assay for the detection of *Giardia intestinalis* and *Cryptosporidium* spp. specific antigens, and to cultures for protozoa and larvae of nematodes. For the identification and differentiation of *Entamoeba histolytica* and *E. dispar* and the detection of *Dientamoeba fragilis* specific Real-time PCR assays were also used, respectively. **Results.** Among the 8,886 patients, 1,477 (16.6%) were affected by intestinal parasitoses [692 males (17.43%), 785 females (15.96%); 1,201 adults (18.58%), 255 paediatric patients (14.02%), 12 age unknown (2.16%); 892 Italian (12.58%), 585 subjects from developing countries (32.52%)]. The most frequently detected protozoa were in order of prevalence *Blastocystis hominis*, *G. intestinalis*, *D. fragilis*, *Entamoeba coli*, *E. dispar*, while the most prevalent helminths were *Enterobius vermicularis*, *Strongyloides stercoralis*, *Taenia saginata*, *Hymenolepis nana*, *Ascaris lumbricoides*, and *Taenia* spp. A number of cases of mixed parasitic infections were also found. Clinical data regarding the patients whose samples were found containing protozoa and/or helminths indicated that the most reported symptoms and signs included abdominal pain, diarrhoea, rectal bleeding and/or perianal pruritus. **Conclusion.** Even though our laboratory is located in a non-endemic area, intestinal parasitoses are frequently diagnosed especially associated to immigration and adoption of children from developing countries. Knowledge about the epidemiology of parasitic infections, including the intestinal one, is advocated in non-endemic areas in order to make an accurate diagnosis, actualize an adequate patient care and adopt appropriate control measures.