

Neglected Parasitic Infections in Campania, South Italy Region, from 2015 to 2019

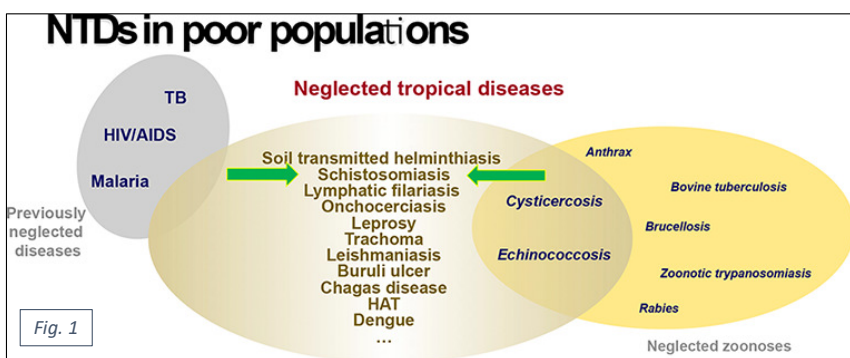
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INTRODUCTION. Neglected Diseases (NTDs) (Fig. 1) occur more often in Western Nations with a high economic standard due to the growing phenomenon of globalization. The goal of the hospital UOS Parasitology team "D. Cotugno" of Naples is to diagnose NTDs parasitic to highlight and report the data to the authorities in charge.

MATERIALS AND METHODS. Concentration techniques, extemporary and permanent colorings and culture were used for copro-urological parasites; instead indirect serological techniques and direct techniques, such as smears, thick drops and culture were used for parasites of organs and tissues.

RESULTS AND CONCLUSION. The copro-parasitological samples were 3674, whose 9% were from non-EU patients and 91% from autochthonous patients. 128 of these samples showed positive results: 6 *A. lumbricoides*, 13 *A. duodenalis*, 4 *S. stercoralis*, 5 *S. mansoni* and 1 *T. trichiura* and 39 *G. duodenalis*, 55 *E. histolytica*, 5 *Taenia* spp (Tab. 1). 151 samples were received for the diagnosis of *S. haematobium*: 68% autochthonous and 32% non-EU, 27 (18%) were positive (Tab. 2), 38 samples were analyzed for *microfilariae*, whose 2 (5%) were positive for *Dirofilaria* spp, 88 samples were received for Chagas: 89% native and 11% non-EU, whose only 3 (4%) were positive, all belonging to non-EU group (Tab. 3). 543 samples were analyzed for suspicion of *Leishmaniasis*, 91% autochthonous and 9% non-EU, whose 26 (5%) were positive (Tab. 4). 223 samples were analyzed for *Echinococco* spp, 82% autochthonous and 18% non-EU, whose 32 (18%) were positive (Tab. 5). Our data show that of these 4717 biological samples analyzed, 209 NTDs were highlighted and treated, whose 122 (58.4%) are from autochthonous patients who travelled to endemic countries to work or to study, while 87 (41.6%) are from non-EU patients (Fig. 2).



Copro-Parasitological tests 2015-2019	Total 3674
Positive samples	128 (3%)
Negative samples	3546 (96%)
Autochthonous	3328 (90%) POS=81 (2.4%)
Non-EU	346 (9%) POS=47 (13.6%)

Tab. 1

<i>S. haematobium</i>	Total 151
Positive samples (Uro-Parasitological and serological tests)	27 (18%)
Negative samples	124 (82%)
Autochthonous	104 (68%) POS=14 (13%)
Non-EU	47 (32%) POS=13 (28%)

Tab. 2

<i>Leishmania</i> spp	Serological and direct tests 543
Positive samples	26 (5%)
Negative samples	517 (94%)
Autochthonous	489 (91%) POS=21 (4.3%)
Non-EU	54 (9%) POS=5 (9.2%)

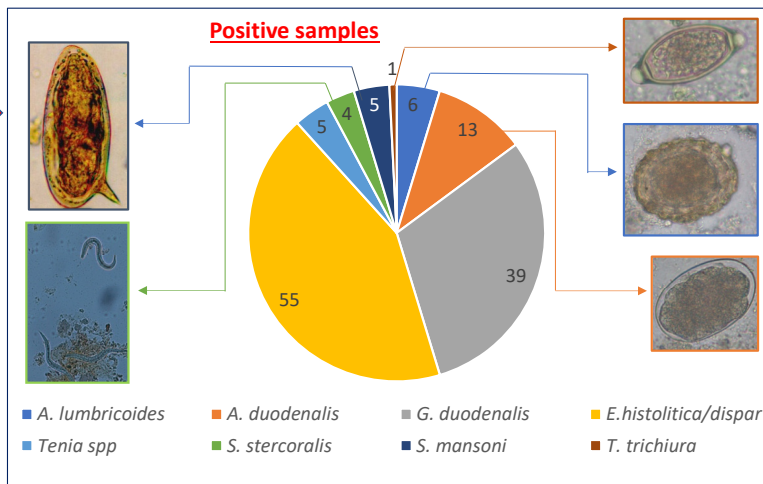
Tab. 3

<i>T. cruzi</i>	N° total 88
Positive samples	3 (4%)
Negative samples	85 (95%)
Autochthonous	78 (88%)
Non-EU	10 (11%) POS=3 (30%)

Tab. 4

<i>Echinococco</i> spp	Serological and direct tests 105
Positive samples	23 (22%)
Negative samples	82 (79.1%)
Autochthonous	60 (52%) POS=4 (6.7%)
Non-EU	45 (43%) POS=19 (42%)

Tab. 5



Total searched NTD	Non-EU	Autochthonous	Total NTD	Positives Non-EU	Positives Autochthonous
4717	507 (11%)	4210 (89%)	209 (4.4%)	87 (17.0%)	122 (3%)
			117 (2.5%)		