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P1324 Real time polimerase chain reaction and clinical characteristics of Dientamoeba fragilis infection

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Background: *Dientamoeba fragilis* has emerged as an important and misdiagnosed cause of chronic gastrointestinal illnesses such as diarrhea and 'irritable-bowel-like' gastrointestinal disease. However, there are still doubts about its pathogenicity. This study describe the influence of *D. fragilis* parasite load in the clinical characteristics of the infection

Materials/methods: We perform a descriptive study in all patients diagnosed to *D. fragilis* infection between 2016-2017. Each patient's clinical history, including diarrhea within the preceding 3 months and abdominal pain, was collected. Blood tests and biochemical analyses, including liver enzyme levels, were performed for all patients. Eosinophilia was defined as >0.5 × 10^9 eosinophils/l . Three stool samples per patient were concentrated using a Copropack SAF, Difco®, following the manufacturer's instructions. These were then stained with lugol and screened under a light microscope with a low magnification to detect helminth eggs, protozoan trophozoites and cysts. Genomic detection was performed using multiplex real-time(rt)-PCR (Seegene Allplex®), which detects 6 pathogenic protozoa (*Giardia lamblia, Cryptosporidium parvum, Cyclospora cayetanensis, Entamoeba histolytica, Dientamoeba fragilis* and *Blastocystis hominis*). This PCR ,as a semiquantitative measure, give us a threshold cycle (Ct) that should be related to the load of genomic material in the sample. A pinworm test was performed in all patients

Results: : Forty-five patients were studied (57.8% female, mean age 41[17]). Most of them were from Spain (57.8%), followed by Equatorial Guinea (13.3%), Ecuador (11%), Colombia (8.9%), Senegal (4.4%), Brazil and Bolivia (2.2% each). The most frequent symptoms were abdominal pain (30%) follow by diarrhea (14%), and anal pruritus (4.5%). Twenty-four patients (55.8%) were asymptomatic. Five patients had hypereosinophilia in the blood. Three patients had a co-infection with *E. vermicularis*. There are no significant differences between the Cts of the symptomatic and asymptomatic patients, which makes us think that the parasitic genetic load is not related to the symptomatology of the patients (29,73[4,85]), p= 0.852 neither the coinfected by *E. vermicularis* patients.

Conclusions: The presence of D. fragilis symptomatic infection is not related with the parasite load. More factors must be considered in his pathogenicity