DIAGNOSIS OF ENTEROBIASIS: WHY USE THE GRAHAM TECHNIQUE?

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Abstract

Enterobiosis is caused by *Enterobius vermicularis*, a nematode that inhabits the large intestine, being common in children. Its most common symptomatology is intense anal itching, generally nocturnal, due to oviposition by the female, which determines the recommendation to carry out parasitological techniques that enable the identification of these eggs directly from the perianal region. Despite of this knowledge, few studies use the Graham Technique, carrying out the parasitological examination with techniques that enable the detection of parasitic structures in fecal samples, determining the underestimation of positivity for *E. vermicularis*. The aim of this study was to diagnose enterobiosis using parasitological techniques in fecal samples and at perianal material. The study was carried out with children aged two to six years old from three community daycare centers in Niterói. It was requested to collect three slides of perianal material from different days for the Graham Technique and two pots of total feces to perform the Ritchie technique modified by Young et al., Faust et al. and fine mesh screening. Samples were received from 95 children, of which 88 submitted at least one fecal sample, totaling 151 samples, and 92 children submitted at least one slide of perianal material, totaling 255 slides. *E. vermicularis* was diagnosed only using the Graham Technique in 12% (11/92) of the children, reinforcing the importance of its use in diagnosing this parasitosis, as this was the most common parasite. 74/92 children submitted all three slides, of which 8 (10.8%) were positive. The use of only one slide showed positivity in 4/5 children. The insertion of a second slide increased the diagnostic efficiency, with results statistically close to the use of three slides. The use of the Graham technique was mandatory to diagnose entetobiaisis, and the use of two slides increased the effectiveness of the diagnosis, minimizing cost and discomfort/work in obtaining samples.

Keywords: parasitological technique. *E. vermicularis*. Nematode