

CLINICO-EPIDEMIOLOGICAL ASPECTS OF PARASITIC INFECTION IN BIHOR COUNTY

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Abstract

In 2009, in the Hospital of Contagious Diseases from Oradea, I have undertaken a study regarding both the clinical-paraclinical aspects of the patients infested with giardiasis and ascaridiasis and the treatment of them.

15 percent of the total number of patients hospitalized in the Hospital of Contagious Diseases, in 2009, were infested with giardiasis, oxiuriasis and ascaridiasis, most of the cases being recorded during the summer period, without significant differences regarding the sex of the patients.

The most frequent cases appeared in children of 3-5 years old (29%), the specific symptoms being: skin and nasal itchiness, abdominal colics and asthenia with loss of appetite. The most frequent associated diseases were: acute viral hepatitis A in giardiasis, acute gastroenterocolitis with salmonella spp. in infection with ascaris lumbricoides.

These two parasite reacted very well to the treatment with albendazol and mebendazol in two cures of three days, with an interval of ten days between the two cures

Keywords: giardiasis, albendazol, gastroenterocolitis

INTRODUCTION

Parasitic infections are responsible for substantial morbidity and mortality worldwide. They are prevalent in Central and South America, Africa, and Asia. They are much less common in Australia, Canada, Europe, Japan, New Zealand, and the US. By far, the greatest impact is on residents of developing areas, but parasitic infections are encountered in developed countries among immigrants and travelers returning from endemic regions and, on occasion, even among residents who have not traveled, particularly those with AIDS or other causes of immunodeficiency (Richard D. Pearson).

Parasitic infection is contamination of one organism with another living organism that then begins to feed off or reside in the initial organism (Rebedea ; Voiculescu).

Parasites usually enter the body through the mouth or skin. Parasites that enter through the mouth are swallowed and can remain in the intestine or burrow through the intestinal wall and invade other organs (Biró). Parasites that enter through the skin bore directly through the skin or are introduced through the bites of infected insects (the vector). Some parasites enter through the soles of the feet when a person walks barefoot or through the skin when a person swims or bathes in water containing the parasites. Rarely, parasites are spread through blood transfusions, through injections

with a needle previously used by an infected person, or from a pregnant woman to her fetus (Crompton) .

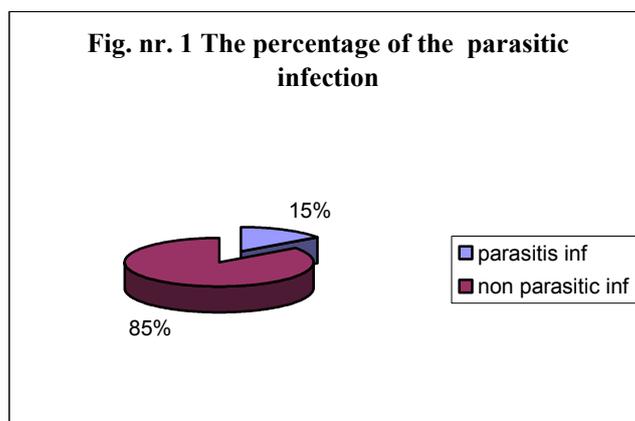
Parasites that infect humans include protozoa (such as amoebas), which consist of only one cell, and worms (helminths, such as the hookworms and tapeworms), which are larger and consist of many cells and have internal organs. Protozoa, which reproduce by cell division, can reproduce inside people. Helminths, in contrast, produce eggs or larvae that develop in the environment before they become capable of infecting people. Development in the environment may involve another animal (an intermediate host). Some protozoa (such as those that cause malaria) and some helminths (such as those that cause river blindness) have complex life cycles and are transmitted by insect vectors.

MATERIAL AND METHOD

In 2009, in the Hospital of Contagious Diseases from Oradea, we have undertaken a study regarding both the clinical-paraclinical aspects of the patients infested with giardiasis and ascariidiosis, diagnosed with de coproparasitological stool examination, and the treatment of the patients with this two diseases.

RESULTS AND DISCUSSIONS

In 2008, 12% of the hospitalized patients have been diagnosed with parasitic infection (giardiasis, oxiuriasis and ascariidiasis), and in 2009 this percent slightly increased up to 15% of the total number of hospitalized patients (4025), taking into account that the number of hospitalizations was almost the same with that in the previous year. (Fig. nr. 1.)



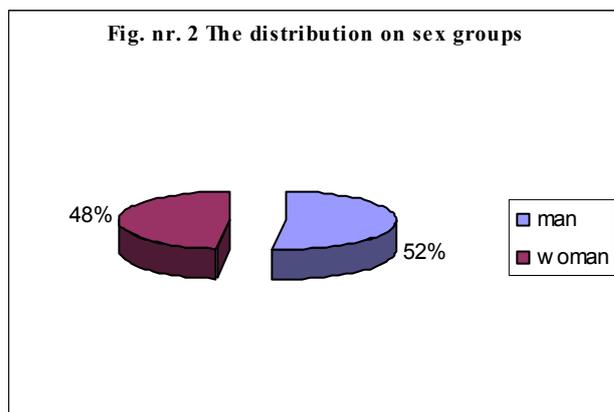
The most infestation situations with parasitic infection in 2009 were reported in the period May-June-July (41%), comparatively with the year 2008 when this climax was recorded only in the period April-May. (Table 1)

Table nr. 1. The infestation situation with parasitic infection in 2009

Month	Percentage
January	7
February	7
March	9
April	8
May	12
June	16
July	13
August	9
September	8
October	5
November	6
December	5

The diagnoses when hospitalizing the patients infested with parasitic infection were: chronic acute cholecystite and acute viral hepatitis A in giardiosis and oxiurasis, enterocolitis with *Salmonella spp.* and shigellosis only with *Shigella flexnerii* in ascariasis.

There weren't noticed significant differences as regards the division of patients on sex groups (52% man, 48% women). (Fig. nr. 2).

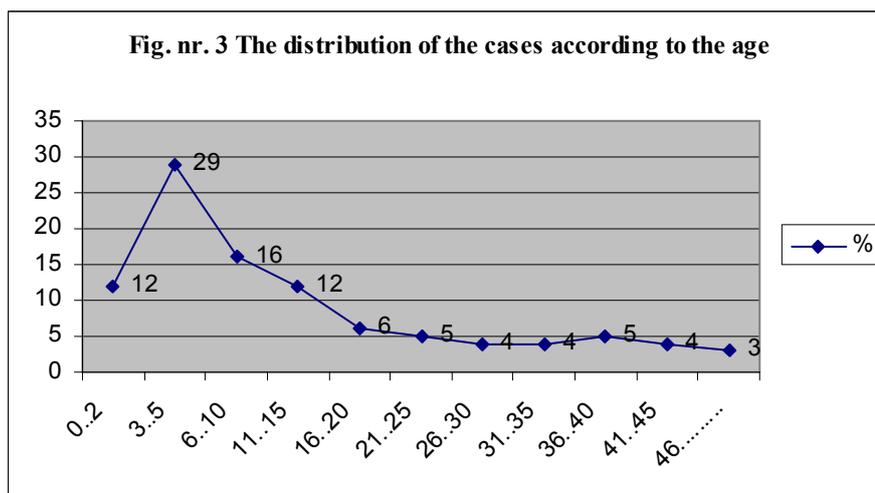


The parasitical diagnosis was established according to the positive coprologic parasitic examination for all the patients.

Another important element was that of the increased number of eosinophils up to 60% of the situations, as well as a slightly increased hepatocytolysis syndrome up to 30% of the situations.

This hepatocytolysis syndrome was maintained slightly increased in the cases of the patients with acute viral hepatitis A associated with giardiasis.

The most frequent cases appeared in children of 3 -5 years old (25%), the specific symptoms being: skin and nasal itchiness, abdominal colics and asthenia with loss of appetite. (Fig. Nr.3).



Giardia lamblia reacted very well to the treatment with *albendazol* (Zentel, Eskazole, Duador) 400 mg/day in two cures of five days, with an interval of ten days between the two cures, and ascariidiasis with oxiurasis reacted very well with *mebendazol* (Vermox).

CONCLUSIONS

- *Albendazol* and *mebendazol* are the most important antiparasitic drugs which leads to the eradication of all the biological stages of the parasites.
- There weren't noticed significant differences as regards the division of patients on sex groups.
- The most frequent cases appeared in children of 3-5 years old (55%),

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