

THE INFECTION WITH ASCARIS LUMBRICOIDES

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Abstract

In 2008, 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, diagnosed with modified Blagg method and Willis method, and the treatment of the patients with giardiasis. Ten percent of the total number of patients hospitalized in the Hospital of Contagious Diseases, in 2008, were infested with giardiasis, 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 2-5 years old (25%), 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, acute gastroenterocolitis.

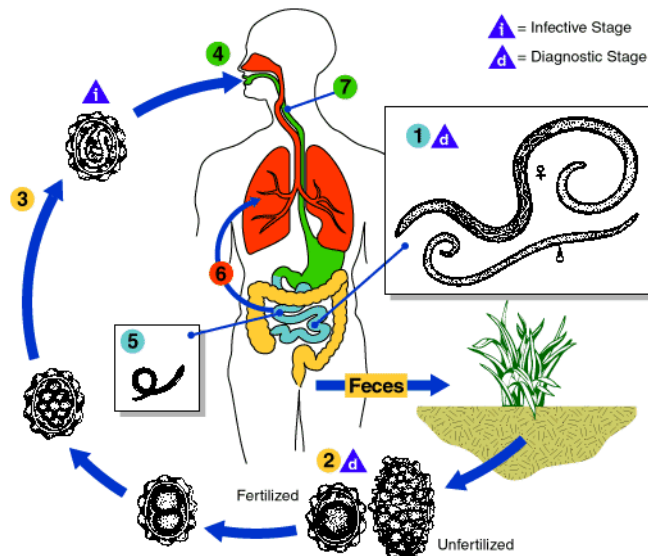
Ascaris lumbricoides reacted very well to the treatment with albendazol in two cures of three days, with an interval of ten days between the two cures.

Keywords: *ascaris lumbricoides, contaminated soil and foodstuffs, albendazol,, gastroenterocolitis*

INTRODUCTION

Ascaris lumbricoides is the largest of the intestinal nematodes affecting humans, measuring 15-35 cm in length in adulthood. Infection begins with the ingestion of embryonated (infective) eggs in feces-contaminated soil or foodstuffs (Biró G.,1993; Moraes L., 1996) . Once ingested, eggs hatch, usually in the small intestine, releasing small larvae that penetrate the intestinal wall. Larvae migrate to the pulmonary vascular beds and then to the alveoli via the portal veins usually 1-2 weeks after infection, during which time they may cause pulmonary symptoms (eg, cough, wheezing). During the time frame of pulmonary symptoms, eggs are not being shed, and thus diagnosis via stool ovas and parasites is not possible. Eggs are not shed in stool until roughly 40 days after the development of pulmonary symptoms

After migrating up the respiratory tract and being swallowed, they mature, copulate, and lay eggs in the intestines. Adult worms may live in the gut for 6-24 months, where they can cause partial or complete bowel obstruction in large numbers, or they can migrate into the appendix, hepatobiliary system, or pancreatic ducts and rarely other organs such as kidneys or brain. From egg ingestion to new egg passage takes approximately 9 weeks, with an additional 3 weeks needed for egg molting before they are capable of infecting a new host (Crompton Dwt.,1988; Kolsky PJ, Blumenthal UJ., 1995) .



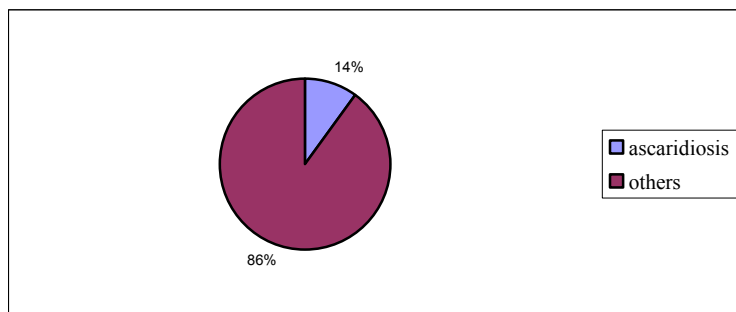
The life cycle of *Ascaris lumbricoides*
 (Daniela Januškova, www.infovek.sk/.../Ascaris_lumbricoides)

MATERIAL AND METHOD

In 2008, in the Hospital of Contagious Diseases from Oradea, I have undertaken a study regarding both the clinical-paraclinical aspects of the patients infested with *ascaris lumbricoides*, and the treatment of the patients with ascariidiosis (Rebedea Ileana, 2000; Voiculescu M.,1990) .

RESULTS AND DISCUSSIONS

In 2007, 10% of the hospitalized patients have been diagnosed with ascariidiosis, and in 2008 this percent slightly increased up to 14% of the total number of hospitalized patients, taking into account that the number of hospitalizations was almost the same with that in the previous year. (Fig: 1.)



The percentage of ascariidiosis

Fig.1

The most infestation situations with ascariasis in 2008 were reported in the period April-May-June, comparatively with the year 2007 when this climax was recorded in the period May-June-July(Fig. 2.).

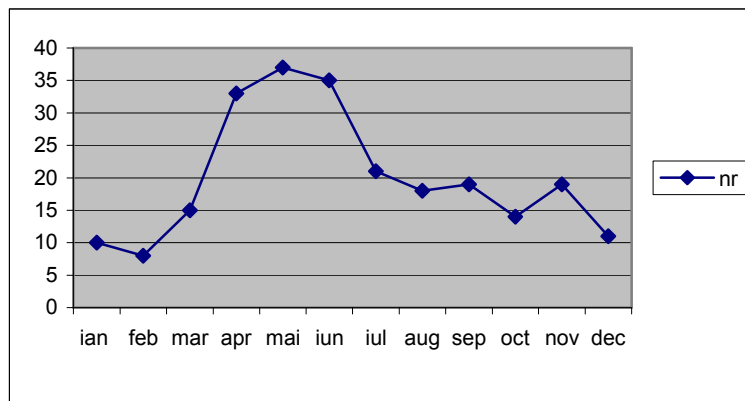


Fig. 2.

The appearance of ascariasis according to the season

The diagnoses when hospitalizing the patients infested with ascariasis were: chronic acute cholecystite, acute viral hepatitis, enterocolitis. There weren't noticed significant differences as regards the division of patients on sex groups (51% man, 49% women). (Fig. 3).

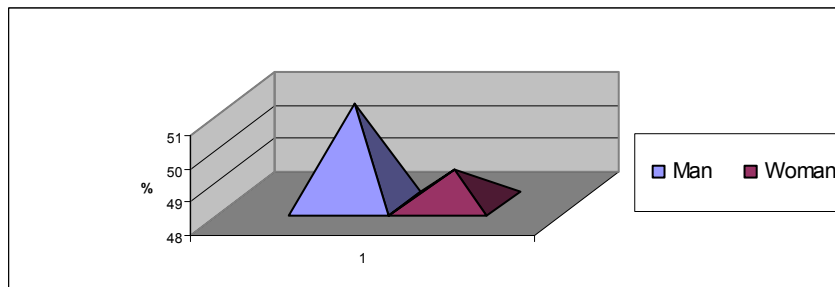


Fig.3

Division of patients on sex groups

The ascariasis 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 70% of the situations, as well as a slightly increased hepatocytolysis syndrome up to 35% of the situations.

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

The most frequent cases appeared in children of 2-5 years old (25%), the specific symptoms being: skin and nasal itchiness, abdominal colics and asthenia with loss of appetite. (Fig. 4).

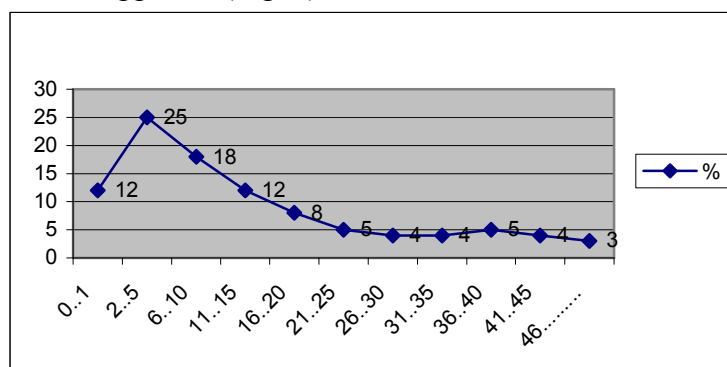


Fig. 4

The distribution of the cases according to the age

Ascaris lumbricoides 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.

CONCLUSIONS

- Albendazol is the only antiparasitic preparation which leads to the eradication of all the biological stages of the parasite.
- 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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