

MAIN APPROACHES TO ANTHELMINTIC THERAPY IN UKRAINE

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According to statistic data of the World Health Organization, up to 16 to 50 million of people die annually from parasitic and infectious diseases. In terms of prevalence, helminth infections take the second place after tuberculosis. Out of 150 existing in the world helminth species there are about 30 in Ukraine (approximately, 75% is composed of enterobiasis and 20% – of ascariasis).

Helminthes are classified into the following groups: roundworms (nematodes), tapeworms (cestodes) and flukes (trematodes). According to the recent findings helminthes affect all, without exception, age groups. The most susceptible to parasitic infections are concerned to be children of preschool and primary school age, mainly at the age 2-10 years. Frequently, children of this age are infected with helminth infections due to the lack of high-grade hygienic skills and non-fully formed immune system.

The aim of our work is to study the basic directions of helminth infections pharmacotherapy in Ukraine.

Pharmacotherapy of helminth infections involves causal treatment – the destruction of helminths (larvicidal, ovicidal, vermifugic impact), and the elimination of the tolerated disease complications (anemia, metabolic disorders, etc.). At the same time, before starting anthelmintic therapy it is recommended to perform medicinal treatment with antihistamines and enterosorbents (preparatory stage).

In accordance with the Order of the Ministry of Health of Ukraine of 23.03.2011 year № 159 National Drug Formulary includes the following classification of anthelmintic medicines:

17.7. Anthelmintic medicines

17.7.1. Medicines, used in trematodosis (praziquantel)

17.7.2. Medicines, used in nematodes

17.7.2.1. Enterobiasis (mebendazole, albendazole, pyrantel, piperazine adipinate)

17.7.2.2. Ascariasis, trichocephalosis, ancylostomiasis, necatoriasis (levamisole, mebendazole, albedazol, pyrantel, piperazine adipinate)

17.7.2.3. Dirofilariasis, toxocariasis, trichinosis, strongyloidiasis (mebendazole, albendazole)

17.7.2.4. Dracunculiasis (metronidazole)

17.7.3. Medicines, used in cestodiasis

17.7.3.1. Hymenolepiasis, taeniasis, teniarinosis, diphyllbothriasis (praziquantel, albendazole)

17.7.3.2. Echinococcus (the main method of treatment – surgery, albendazole)

17.7.3.3. Cysticercosis (the main method of treatment – surgery, praziquantel, albendazole)

17.7.3.4. Other cestodosis (albendazole, praziquantel)

Today, there are nineteen medicines for the treatment of helminth infections represented in the compendium online. Active ingredients of eighteen of them are mebendazole, praziquantel, albendazole, piperazine, pyrantel, levamisole (level of evidence B). However, only one drug is of natural plant origin – flowers of tansy.

Thereby, the creation of new anthelmintic medicines, mainly on the basis of medicinal plants, is an urgent task of the modern Ukrainian pharmacy.