PROSPECTS FOR THE DEVELOPMENT OF MEDICINES FOR THE TREATMENT OF HELMINTH INFECTION BASED ON MEDICINAL PLANT RAW MATERIAL

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Introduction. The most susceptible to helminth infection are children aged 7-10 years. However, the existing range of the medicines for the treatment of helminth infection includes, in the main, substances of synthetic origin, while not all of them are suitable for pediatric practice.

Aim. The aim of this work is to investigate prospects of the development of new domestic medicines for helminthes treatment on the basis of medicinal plant raw material.

Materials and methods. Analysis of the proposed range of medicines for helminth infection treatment was carried out on the bases of compendium and the Reference book of medicines of Ukraine (04/01/2013).

Results and discussion. Pharmaceutical market of Ukraine includes the following medicines with anthelminthic activity: praziquantel (P02B A01), mebendazole (P02B A01), albendazole (P02B A03), piperazine (P02C B01), pyrantel (P02C C01), levamisole (P02C E01) and tansy flowers (P02C X10**).

Foreign experience in the treatment of helminthes provides two goals of pharmacotherapy: the destruction of helminthes and elimination of the illness complications. Therapy with medicines on the basis of mebendazole, albendazole, thiabendazole, niklozamina, praziquantel is recommended. Phytomedicines are not given in guidelines of the USA and the UK neither as adjuvant therapy nor during the rehabilitation period. Also, it is given that existing medicines cannot be used in pregnant women, nursing mothers and children under the age of 2 years.

Nevertheless, there are a lot of recipes to fight against the different types of helminthes in folk medicine. They are based on such plants as tansy flowers, Artemisia Cina flowers, pumpkin seeds, onion bulbs, male fern, aspen bark, cloves, elecampane, ginger, etc. The listed plants have been used for decades and still have not lost their popularity. The effectiveness of these traditional methods is quite high, indicating the prospects of scientific research to create anthelmintic medicines based on them. For example, it was clinically proven that aspen’s bark dry extract has a high anthelmintic action when opisthorchiasis.

Conclusions. Based on the above-mentioned, it can be concluded that work aimed at creating medicines based on this and other plant is relevant and meets the needs of the modern pharmaceutical market.