MINISTRY OF PUBLIC HEALTH OF UKRAINE
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# TOPICAL ISSUES OF NEW DRUGS DEVELOPMENT

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# PHARMACOTHERAPY OF TUBERCULOSIS

Noskova Yu.O., Tryshchuk N.M.
The National University of Pharmacy, Kharkiv, Ukraine
noskova.yulya@bk.ru

Tuberculosis (TB) is an infectious disease caused by a pathogen - Mycobacterium tuberculosis, which is characterized by the formation of specific granulomas in various organs and tissues in combination with nonspecific reactions and polymorphic clinical picture, depending on the shape, phase, location and prevalence of pathological process.

The problem of TB disease is very important in our world now, because it's one of the most common diseases. According to statistics, every third person is infected; TB mortality is 20% of the morbidity. There are two forms of TB: pulmonary and extrapulmonary tuberculosis.

The goals of TB treatment are to shorten the clinical course of TB, prevent complications, prevent the development of latency and/or subsequent recurrences, and decrease the likelihood of TB transmission. In patients with latent TB, the goal of therapy is to prevent disease progression. The development of new drugs and methods of treatments will allow treat the latent, active and multidrug-resistant forms of tuberculosis.

Currently TB treatment is equally possible as inpatient and outpatient. Treatment starts with causal treatment of the anti-TB drugs of first line, which are the most effective.

New cases are initially treated with four drugs: isoniazid, rifampin, pyrazinamide, and either ethambutol or streptomycin. After 2 months, they are then treated with a continuation phase of 4 months with isoniazid and rifampin. Patients requiring retreatment should initially receive at least 5 drugs, including isoniazid, rifampin, pyrazinamide, and at least 2 (preferably 3) new drugs to which the patient has not been exposed.

To improve the effectiveness of treatment initially conduct intensive treatment during 2 months of therapy, every day: isoniazid - 5 mg/kg PO, no more than 300 mg for day; rifampicin - 10 mg/kg/day PO or 10 mg/kg PO twice weekly; pyrazinamide - 25 mg/kg PO. According to foreign sources in the intensive phase of treatment also