PHARMACOTHERAPY MULTI-RESISTANT PULMONARY TUBERCULOSIS

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Introduction. Tuberculosis (TB) – chronic infectious disease caused by acid-fast mycobacteria-Mycobacterium tuberculosis, unfortunately, remains the leading cause of morbidity and is among the 10 most common causes of death worldwide. According to the WHO, in 2019, about 10 million people worldwide fell ill.

Multidrug-resistant pulmonary tuberculosis (MRTBL) is an extremely important component of the modern epidemic TB. The WHO reports that Ukraine is one of the countries with the largest number of patients with multidrug-resistant tuberculosis.

So, there is a need for introduction of new schemes of treatment with effective anti-TB drugs.

Aim. Get acquainted with Ukrainian TB treatment protocols and compare them with the recommendations of the WHO, Medscape and Merck Manual.

Materials and methods. During the preparation of the work theoretical methods were used: search, collection, comparison, analysis and processing of information. The study was conducted using an analysis of literature sources – Ukrainian and European protocols for the treatment of tuberculosis.

Results and discussion. Treatment of resistant tuberculosis (TB) - particularly resistant to rifampicin, as well as multidrug-resistant TB and broad-drug-resistant tuberculosis - presents a number of challenges for clinicians and national TB programs. The treatment regimen for chemoresistant tuberculosis (the form in which the patient secretes Mycobacterium tuberculosis resistant to one or more anti-tuberculosis drugs) is changed depending on the resistant drug. Use second-line drugs (levofloxacin, moxifloxacin, prothionamide, cycloserine).

Multiresistance (MRTB) – resistance MBT, at least to isoniazid (H) and rifampicin (R), and often to more TB drugs of the I and II series, which is confirmed by a laboratory method in the drug sensitivity test.

Revised classification of anti-TB drugs recommended for use in long-term treatment of MRTB, The drugs were regrouped into three categories and evaluated based on the latest data on the relationship between efficacy and safety: Group A: Drugs that should be given priority: levofloxacin / moxifloxacin, bedaquiline and linezolid. Group B: Drugs to be added further: clofazimine, cycloserine / terizidone. Group C: Drugs to be included to complete the course of treatment and in cases where drugs from groups A and B cannot be used: ethambutol, delamanide, pyrazinamide, imipenem-cilastatin, meropenem, amikacin (streptomycin), ethionamide / prothionamide, p-aminosalicylic acid. Drugs that are no longer recommended are kanamycin and capreomycin, given the increased risk of treatment failure and recurrence associated with their use in long-term MRTB treatments.

MRTB patients with long-term treatment regimens should include all three drugs group A and at least one drug group starting treatment with at least four TAP, are likely to be effective, and using at least three drugs after stopping bedakvilinu (Bdq). If only one or two drugs of group A are used, both drugs of group B should be included. If the scheme cannot be composed only of drugs of groups A and B, then drugs of group C should be added as a supplement.

In 2018, modern anti-tuberculosis drugs bedaquiline were registered in Ukraine under the trade name SIRTURO. The drug belongs to the group of diarylquinolines, synthesized exclusively for the treatment of tuberculosis, has bactericidal and sterilizing action, is tablet, is prescribed to

patients over 14 years of age. Bedaquiline is recommended to be included in long-term treatment regimens for patients with MRTB: first or second week: 400 mg once daily; 3-24 weeks at 200 mg 2 times a week. In most cases, the total duration of treatment with long-term regimens is recommended for 18-20 months; the duration of treatment can be varied according to the patient's response to treatment.

Delamanide is a derivative of nitro-dihydro-imidazo-oxazole, which inhibits the synthesis of the cell wall of Mycobacterium tuberculosis and has a high activity against intracellular mycobacteria of tuberculosis in macrophages. Delamanid is safe for HIV patients receiving antiretroviral therapy and children from the age of six. It does not have cross-resistance with any other anti-TB drug, and can also be used for the prophylactic treatment of TB in contact with a patient with drug-resistant TB with resistance to anti-TB drugs of the fluoroquinolone group. The using of delamanide gives patients with advanced resistance a real chance for recovery and, consequently, for life.

Conclusions. Tuberculosis is a complex disease for both the patient and their families and healthcare professionals. The main goal of the new WHO Global TB Strategy until 2035 is to free the world from TB while achieving zero morbidity, mortality and suffering from this disease.

THE STUDY OF THE EFFECTS OF A COMBINATION OF MOTHERWORT DRY TINCTURE WITH GAMMA-AMINOBUTYRIC ACID ON THE BEHAVIOR OF RATS IN THE "OPEN FIELD" TEST.

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Introduction. One of the indicators of a high level of quality of life is a person's mental health. However, at the present time in the world there is a tendency towards further growth of various pathologies of the central nervous system (increased irritability, anxiety, fear, etc.). Almost 25% of the world's population suffers from mental illness, among which anxiety disorders are one of the most common diseases. In Ukraine, more than 2 million people suffer from mental disorders, and their annual growth rate is 4%. The leading component of the complex of neuropsychic manifestations is most often the state of anxiety and fear.

The available assortment of psychotropic drugs does not always allow solving the problems of therapy of diseases of the central nervous system, since most of them have a negative effect on the body. In this regard, herbal preparations have advantages over synthetic ones.

Aim. To study the effect of a combination of motherwort dry tincture and gamma-aminobutyric acid on the behavioral responses of experimental animals after stress exposure in the "open field" test.

Materials and Methods. The experiments were carried out on 42 white outbred male rats weighing 220-250 g. 50 mg/kg and 0.3 ml/kg, respectively, which were injected intragastrically in the form of aqueous solutions and suspensions for 14 days.

The effect of the combination of SNSC + GABA and reference drugs on behavioral responses in rats was investigated using the "open field" test.

The evaluation criteria were: the number of squares crossed (locomotor activity), the number of vertical racks, peeping into the hole (orientation-research activity), the number of urinations, boluses, grooming (emotional reactions and their vegetative accompaniment) in 3 minutes. observation.