provided there is good follow-up, can safely be observed for 48 to 72 h and given antibiotics only if no improvement is seen.

Depending on various factors , antibiotic therapy for the treatment of acute otitis media is divided into basic, antibacterial therapy for allergy to penicillin, therapy for adults with immunodeficiency and body-specific therapy.

Conclusions. Preferred antibacterial therapy directed to the use of organism-specific pattern aimed at Streptococcus pneumoniae , Haemophilus influenzae, Moraxella catarrhalis, β-hemolytic streptococci , since it is aimed at eliminating the cause of the disease.

PHARMACOTHERAPY OF LOW BACK PAIN

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Introduction. Low back pain it is a clinical syndrome, which is characterized by pain in the spine. According to WHO, approximately 45% of people around the world experienced back pain at least once in their lives. Back pain is the second most frequent cause of appeals to a doctor after respiratory diseases and the third most frequent cause of hospitalization.

Aim. Get to know the protocols for treating back pain.

Materials and methods. We reviewed Medscape medical guidelines.

Results and discussion. The purpose of pharmacotherapy is to reduce back pain. Pharmacotherapy of low back pain primarily involves the use of nonsteroidal anti-inflammatory drugs for the relief of pain syndrome. Anti-inflammatory drugs have both analgesic and anti-inflammatory properties because they can affect the pathophysiological process mediators. Also used are muscle relaxants with a central mechanism of action. Miorelaksants improve blood supply to spasmodic muscles, thereby reducing spasm. As symptomatic therapy for acute pain in the back, foreign sources recommend using acetaminophen (Paracetamol). With chronic back pain, successfully used anticonvulsants and tricyclic antidepressants. Another group that is used in chronic pain is selective serotonin reuptake inhibitors. This group has shown less side effects than tricyclic antidepressants. Topical therapy is to deliver medication through a sick spot. The drug is transmitted through the skin to shallow depth and operates locally. For topical therapy, 5% of FDA-approved lidocaine patches are used as an effective treatment for chronic low back pain. Also, in the treatment of back pain, the use of non-medicated treatment is in high demand. (orthopedic regime, that is, to reduce the load, sharp movements, magnetotherapy, acupuncture, massage, ultrasound, electric muscle stimulation.

Conclusions. Pharmacotherapy for back pain includes pathogenetic and sympathetic therapy.

MODERN PHARMACOTHERAPY AND PREVENTION OF DIPHTHERIA

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Introduction. Diphtheria is an acute infectious disease caused by toxigenic cinnabar bacteria with airborne transmission and is characterized by the formation of fibrinous attacks in the site of invasion of the pathogen, most often on the mucous membranes of the oropharynx and respiratory tract, general intoxication, toxic damage to the cardiovascular, nervous systems, adrenal glands, kidney. Diphtheria is a long-standing illness that existed during the days of Hippocrates. Epidemics were recorded in the sixteenth and seventeenth centuries in Spain, in the eighteenth century – in New England and the nineteenth century – in England, Austria, Germany and Denmark. Active immunization with diphtheria

toxoid was developed in the 1930s, proclaiming the beginning of elimination of diphtheria. But in the 90s, diphtheria re-emerged in the C.I.S. In Ukraine, in 2018, several cases of diphtheria have been reported. Therefore, the prevention of diphtheria and specific pharmacotherapy are on the fore.

Aim of this work is to study the methods of modern pharmacotherapy and prevention of diphtheria in international medical practice.

Materials and methods. We analyzed the protocols for the provision of medical care to patients with diphtheria in the pharynx, approved in Ukraine, and European gadgets for pharmacotherapy and prevention of diphtheria.

Results and discussion. For a specific pharmacotherapy, use anti-diphtheria serum, 1 ml of which contains at least 1500 international anti-toxic activity units. Dosage of serum depends on the form of diphtheria. Antibiotics are recommended as etiotropic pharmacotherapy. Macrolides (erythromycin, azithromycin) and penicillins (procaine-penicillin G and phenoxymethylpenicillin) are recommended. In moderate and severe forms of diphtheria, glucocorticosteroids (prednisolone) are recommended. Currently, World Health Organization recommends to use of specific prevention planned for the entire population of children implanted in 2, 4, 6 and 18 months. Vaccination is carried out by the pertussis-diphtheria-right tetanus adsorbed vaccine (DTaP-vaccine). Revaccination against diphtheria is recommended for 6 years children with adsorbed diphtheria and tetanus toxoid (DTa-vaccine), followed by 16 years – adsorbed diphtheria-tetanus toxoid with reduced antigen content (DTm-vaccine).

Conclusions. Control of diphtheria is based on primary prevention of the disease by ensuring high immunity of the population through vaccination. And modern pharmacotherapy is based on the immediate introduction of anti-diphtheria serum.

PHARMACOTHERAPY FOR SCARLET FEVER

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Introduction. Scarlet fever is uncommon today, but outbreaks still occur. Transmission is enhanced in environments that result in close contact among people (eg, in schools or day-care centers).

Scarlet fever, a predominantly childhood disease, usually follows a pharyngeal streptococcal infection; less commonly, it follows streptococcal infections at other sites (eg, the skin). Scarlet fever is caused by group A streptococcal strains that produce an erythrogenic toxin, leading to a diffuse pink-red cutaneous flush that blanches with pressure. The rash is seen best on the abdomen or lateral chest and as dark red lines in skinfolds (Pastia lines) or as circumoral pallor. The rash consists of characteristic numerous small (1- to 2-mm) papular elevations, giving a sandpaper quality to the skin. The upper layer of the previously reddened skin often desquamates after fever subsides. The rash usually lasts 2 to 5 days. A strawberry tongue (inflamed papillae protruding through a bright red coating) also occurs and must be differentiated from that seen in toxic shock syndrome and Kawasaki disease. Other symptoms are similar to those in streptococcal pharyngitis, and the course and management of scarlet fever are the same as those of other group A infections.

Aim. Studying the pharmacotherapy of scarlet fever in international medical practice.

Materials and methods. The goals in the treatment of scarlet fever are to prevent acute rheumatic fever, to reduce the spread of infection, to prevent poststreptococcal glomerulonephritis and suppurative sequelae (eg, adenitis, mastoiditis, ethmoiditis, abscesses, cellulitis), and to shorten the course of illness. Antibiotic therapy is the treatment of choice for scarlet fever. Whether antibiotics prevent poststreptococcal glomerulonephritis is still debated in the literature.

Resultsanddiscussion. Penicillin (or amoxicillin) remains the drug of choice (documented cases of penicillin-resistant group A streptococcal infections still do not exist). A first-generation cephalosporin may be an effective alternative, as long as the patient does not have any documented anaphylactic reactions to penicillin. If this is the case, clindamycin or erythromycin may be considered as an