

3. If the surgeon cannot completely remove the pituitary tumor, he usually prescribes radiation therapy to be used in conjunction with surgery.

Medications to control excessive production of cortisol at the adrenal gland include ketoconazole, mitotane (Lysodren) and metyrapone (Metopirone).

Ketoconazole – an imidazole derivative – in adequate doses reduces steroid production in the adrenal glands, inhibiting many steroid enzymes. Recommended at 200-1200 mg per day.

Mitotane – it has a cytotoxic effect on adrenal cells, and it also seems to inhibit the function of the adrenal cortex without destroying the cells. Is initiated at a dose of 0.5-1 g/per day, which is titrated against serum cortisol levels by 0.5-1 g every few weeks.

Methirapon – inhibits 11 $\beta$ -hydrolase. The routine starting dose is 250 mg, three times per day, with cortisol levels falling within 2 h of initiating the treatment

Mifepristone (Korlym, Mifeprex) is approved for people with Cushing syndrome who have type 2 diabetes or glucose intolerance. Mifepristone does not decrease cortisol production, but it blocks the effect of cortisol on tissues. The tablets are taken on an empty stomach or 2 hours after ingestion.

The latest cure for Cushing's disease – Pasireotide (Signifor) – is a multi-ligand analogue of somatostatin. Pasireotide is the only drug registered for the treatment of adult patients in whom surgical treatment is ineffective or impossible. It works by decreasing the production of ACTH from the pituitary tumor. This drug is given as an injection. The recommended starting dose is 0.9 mg 2 times / day.

## MODERN PHARMACOTHERAPY OF INFECTIVE ENDOCARDITIS

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**Introduction.** Infective endocarditis is a serious infectious disease with a complicated course. It is characterized by the formation of vegetations on valves or under-valvular structures, their destruction and the development failure of the valve. According to the data of AHA, infective endocarditis is an uncommon infectious disease with an annual incidence ranging from 3 to 7 per 100000 persons.

**Aim.** Study of modern standards of medical care for patients on infective endocarditis.

**Materials and methods.** We conducted an analysis of articles, an adapted clinical guideline based on evidence, a unified clinical protocol providing medical care to patients with infective endocarditis.

**Results and discussion.** The main symptoms of infectious endocarditis are high fever with chills, lethargy, shortness of breath, muscle and joint pain, noise in the heart. Complications of the disease are heart failure, thromboembolic complications. Treatment of infective endocarditis is aimed at eradication of the pathogen. The main direction of treatment is antibacterial therapy. The choice of antibacterial drugs depends on the pathogen. For empirical treatment, a group of  $\beta$ -lactam antibiotics, penicillins (ampicillin) in combination with a group of penicillins resistant to  $\beta$ -lactamases (flufloxacillin) and a group of aminoglycosides (gentamicin) are used. When detected a patient is allergic to penicillins, glycopeptide antibiotics (vancomycin) to appoint in combination with aminoglycosides (gentamicin). If the causative agent of the disease is a group of streptococci, a group of  $\beta$ -lactam antibiotics (penicillin G or amoxicillin or ceftriaxone) in combination with an aminoglycoside group (gentamicin or netilmicin) is used for treatment. Patients with allergy to  $\beta$ -lactam antibiotics are usually prescribed a group of glycopeptide antibiotics in combination with gentamycin. If the causative agent is staphylococcus, the treatment is carried out by a group of  $\beta$ -lactam antibiotics, penicillins (flufloxacillin or oxacillin) or alternative therapy – sulfonamides and lincosamides (co-trimoxazole in combination with clindamycin). In patients with penicillin or methicillin-resistant staphylococcus allergy, glycopeptide antibiotics are used for treatment, or a group of lipopeptides (daptomycin) is an alternative treatment.

**Conclusion.** Thus, we have studied and analyzed the current standards of medical care for patients who have infective endocarditis and came to the conclusion that pharmacotherapy is aimed at eliminating the exciter of the disease.

## PHARMACOTHERAPY OF VASCULAR DEMENTIA

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**Introduction.** Vascular dementia is the second most common form of dementia after Alzheimer Disease (AD). The condition is not a single disease; it is a group of syndromes relating to different vascular mechanisms.

**Aim.** Study of protocols and standards of medical care of vascular dementia.

**Materials and methods.** We have reviewed and compared Medscape medical recommendations, Msdmanuals.

**Results and discussion.** Risk factors for vascular dementia include hypertension, smoking, hypercholesterolemia, diabetes mellitus, and cardiovascular and cerebrovascular disease. Vascular dementia is the second most common cause of dementia in the United States and Europe, but it is the most common form in some parts of Asia. The prevalence rate of vascular dementia is 1.5% in Western countries and approximately 2.2% in Japan. In Japan, vascular dementia accounts for 50% of all dementias that occur in individuals older than 65 years. In Europe, vascular dementia and mixed dementia account for approximately 20% and 40% of cases, respectively.

The mainstay of management of vascular dementia is the prevention of new strokes. This includes administering antiplatelet drugs and controlling major vascular risk factors. Aspirin has also been found to slow the progression of vascular dementia. Medical therapy options include antiplatelet and hemorheologic agents. Studies have shown antiplatelet agents are useful for preventing recurrent stroke. In vascular dementia, a pilot study showed that aspirin has positive effects on cognitive deficits. Other antiplatelet agents are ticlopidine and clopidogrel.

Improve flow properties of blood by lowering viscosity, improving erythrocyte flexibility, inhibiting platelet aggregation and thrombus formation, and suppressing leukocyte adhesion.

Neuroprotective drugs such as nimodipine, propentofylline, and posatirelin are currently under study and may be useful for vascular dementia.

**Conclusions.** Pharmacotherapy of drug-induced vascular dementia is pathogenetic and symptomatic therapy.

## MODERN PHARMACOTHERAPY OF CHLAMYDIA INFECTION

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**Introduction.** Chlamydia infection is a common infectious disease with a predominant lesion of the genitourinary system, related to sexually transmitted diseases (STDs), the caused by Chlamydia trachomatis. Also the microorganism can be detected in the conjunctiva and nasopharynx. Infection of newborns is transmitted by contact with infected maternal genitals. According to statistics, 100 million