## MODERN PHARMACOTHERAPY OF SCHIZOPHRENIA

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**Introduction**. Schizophrenia is a clinical diagnosis. Schizophrenia is characterized by psychosis, hallucinations, delusions, disorganized speech and behavior, flattened affect, cognitive deficits, and occupational and social dysfunction. People with schizophrenia have lower rates of employment, marriage, and independent living compared with other people. The lifetime prevalence of schizophrenia has generally been estimated to be approximately 1% worldwide. The average age at onset is early to mid 20 years in women and somewhat earlier in men; about 40% of males have their first episode before age 20. About 5 to 6% of patients with schizophrenia commit suicide, and about 20% attempt it. Suicide is the major cause of premature death among people with schizophrenia and explains, in part, why on average the disorder reduces life span by 10 yr.

Aim. Study of modern standards of the medical care of patients with schizophrenia.

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

Results and discussion. Treatment of schizophrenia requires integration of medical, psychological, and psychosocial inputs. Antipsychotic medications diminish the positive symptoms of schizophrenia and prevent relapses. Drugs are divided into conventional antipsychotics (chlorpromazine, fluphenazine, haloperidol, thiothixene) and 2nd-generation antipsychotics (olanzapine, clozapine, quetiapine, asenapine) based on their specific neurotransmitter receptor affinity and activity. There is no clear antipsychotic drug of choice for schizophrenia. The choice of which drug to use for treatment of a patient with schizophrenia depends on many issues, including effectiveness, cost, side-effect burden, method of delivery, availability, and tolerability. At the beginning of therapy, the appointment of one antipsychotic is recommended. In the absence of a therapeutic effect within 4-12 weeks, it is necessary to switch to the use of another antipsychotic or to enhance the antipsychotic effect. After reaching the expected results of active treatment at the stage of stabilizing therapy, a decrease in the dose of antipsychotic may be achieved.

**Conclusion**. Thus, we have studied and analyzed the current standards of medical care of patients with schizophrenia, according to which therapy of antipsychotic medications.

## MODERN PHARMACOTHERAPY FOR MENOPAUSE

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**Introduction.** Menopause, by definition, is the final menstrual period. It is a universal and irreversible part of the overall aging process as it involves a woman's reproductive system. Menopause is diagnosed after 12 months of amenorrhea and is characterized by a myriad of symptoms that include changes from regular, predictable menses; vasomotor and urogenital symptoms such as vaginal dryness and dyspareunia; and sleep and mood dysfunction. Factors that can lower the age of physiologic menopause include the following: smoking, hysterectomy, oophorectomy, fragile X carrier, autoimmune disorders, living at high altitude, history of receiving certain chemotherapy medications or undergoing radiotherapy.

Aim. Studying the methods of providing medical care to women during menopause.

**Materials and methods.** We analyzed many scientific articles from various adapted clinical settings, studied specialized medical literature, which described effective methods of providing medical care during the menopause.

**Results and discussion.** As ovaries age, their response to the pituitary gonadotropins follicle-stimulating hormone (FSH) and luteinizing hormone (LH) decreases, initially causing a shorter follicular phase, fewer ovulations, and decreased progesterone production. The number of viable follicles decreases;

eventually, the few remaining follicles do not respond, and the ovaries produce very little estradiol. During menopause, androstenedione levels decrease by half. Decreased levels of ovarian inhibin and estrogen, which inhibit pituitary release of LH and FSH, result in a substantial increase in circulating LH and FSH levels.

The basis of menopause therapy are the following groups of drugs, such as Hormones (estrogen, progesterone), which is most effective in the treatment of symptoms of menopause. They are used to alleviate the moderate or severe hot flashes, and with the inclusion of estrogen - to relieve the symptoms associated with vulvovaginal atrophy. The timely start of substitution hormonal therapy can be a means of preventing cardiovascular disease. Symptomatic therapy may be used. Preparations for the treatment of concomitant diseases (osteoporosis (Calcium and vitamin D, bisphosphonates, hormone replacement therapy), etc.).

**Conclusions.** Thus, after analyzing modern methods of providing medical assistance in menopause, we concluded that the most effective drugs for the treatment of symptoms of menopause are hormones.

## MODERN PHARMACOTHERAPY OF BENIGN PROSTATIC HYPERPLASIA

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**Introduction**. Benign prostatic hyperplasia (BPH) is one of the most common benign illnesses in men, which leads to benign prostatic enlargement, prostatic obstruction and / or symptoms of the lower urinary tract. BPH is a common problem that affects the quality of life in approximately one third of men older than 50 years. Based on autopsy studies, the prevalence of BPH increases from 8% in men aged 31 to 40 yr to 40 to 50% in men aged 51 to 60 yr and to > 80% in men > 80 yr. BPH is histologically evident in up to 90% of men by age 85 years. Worldwide, approximately 30 million men have symptoms related to BPH.

**Aim.** Study of modern standards of medical care for patients on benign prostatic hyperplasia.

**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 benign prostatic hyperplasia.

**Results and discussion.** Symptoms of BPH include progressive lower urinary tract symptoms: urinary frequency, urgency, nocturia, hesitancy, intermittency, urinary retention.

For partial obstruction with troublesome symptoms, all anticholinergics, sympathomimetics, and opioids should be stopped, and any infection should be treated with antibiotics. For patients with mild to moderate obstructive symptoms, alpha-adrenergic blockers (eg, terazosin, doxazosin, tamsulosin, alfuzosin) may decrease voiding problems. The 5 alpha-reductase inhibitors (finasteride, dutasteride) may reduce prostate size, decreasing voiding problems over months, especially in patients with larger (> 30 mL) glands. A combination of both classes of drugs is superior to monotherapy. For men with concomitant erectile dysfunction, daily tadalafil may help relieve both conditions. Many OTC complementary and alternative agents are promoted for treatment of BPH, but none, including the thoroughly studied saw palmetto, has been shown to be more efficacious than placebo. Surgery is done when patients do not respond to drug therapy.

**Conclusion**. Thus, we have studied and analyzed the current standards of medical care for patients on benign prostatic hyperplasia, according to which etiotropic therapy of alpha-adrenergic blockers is recommended for benign prostatic hyperplasia, modern pharmacotherapy is aimed at eliminating the symptoms of the disease.