

## TOPICAL $\alpha$ -ADRENOMIMETICS FOR CHILDREN IN UKRAINE: CLINICAL AND PHARMACOLOGICAL ANALYSIS

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**Introduction.** Colds are one of the most frequent pathological conditions in pediatric practice. Colds include such symptoms as the cough, fever, sore throat, and, especially, runny nose. The mucous membrane of the paranasal sinuses is involved into the pathological process in 90% of cases of children with acute respiratory viral infections. Thus, vasoconstrictive drugs and decongestants are necessarily included in the complex of anti-cold treatment. However, when it concern the child, parents often do not pay attention to the composition, the dose, the dosage form and the possible side effects of drugs that are especially dangerous for the child's body.

**Aim.** Study the vasoconstrictors and decongestants and determine the possibility of their use in children of different ages in Ukraine.

**Materials and methods.** A descriptive method for comparing vasoconstrictors and decongestants was used. Instructions for the medical use of vasoconstrictors and decongestants registered in Ukraine were the objects of study.

**Results and discussion.** In Ukraine, topical agents for the treatment of runny nose are presented by two main groups: vasoconstrictors and a combination of vasoconstrictors with decongestants, predominantly H1-blockers of histamine receptors. Separately, a group of drugs based on a hypotonic 0.65% solution of sodium chloride should be noted. Vasoconstrictors are mainly presented by xylometazoline preparations (45%), oxymetazoline (34%), naphazoline (8%), tramazoline (1%) and phenylephrine (12%). Almost each active substance is registered in two dosage forms – nasal drops or spray. There is a topical gel of xylometazoline and, an emulsion of naphazoline. Most drugs are registered in at least two and some – in three concentrations. It was found that there is no clear relation between the concentration of the active substance and the possibility of drug usage in children. So for babies the phenylephrine is allowed in the concentration of 0.125% and oxymetazoline of 0.01% only. The xylometazoline which is widely available on the market is allowed to children only after the first year in the nasal drops of 0.05% concentration.

**Conclusions.** It is necessary to take into account the age limitations for the use of topical vasoconstrictors and their side effects. The pharmacist must strictly control and prevent parents' attempts to use drugs for child independently, without pediatrician's consultation. If necessary, the use of hypotonic solution of sodium chloride or low-dose vasoconstrictors with labels "for children", "kids", "baby" is possible.

## CLINICO-PHARMACOLOGICAL APPROACHES TO TREATMENT OF ANEMIA IN PREGNANT WOMEN IN ANTENATAL CLINICS

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**Introduction.** For many countries, anemia is a medical and social problem, since it leads to a violation of a condition of patients, reducing their efficiency and causes functional changes in the organs and systems of the body. Of particular importance, this problem gets during pregnancy, due to the high rate of pregnancy complications.

**Aim.** To analyze the clinical and pharmacological action of oral iron drugs used for anemia in pregnant women's clinic.

**Materials and methods.** To conduct a clinical assessment 47 women attended the antenatal clinic Outpatient Department The «University Clinics» Scientific Center Kharkov National Medical University

about anemia in pregnant women. In a retrospective analysis took into account the action of drugs that are administered in case of anemia in pregnant women. Drugs of choice are two drugs ferrous iron. "Sorbifer Durules" - a combination of iron and ascorbic acid. "Gino - Tardiferon" - iron complex preparation of prolonged action that restores iron deficiency and folic acid in the body. Thanks to the combined composition, they significantly increase the concentration and maintain long serum iron, have fewer side effects.

**Results and discussion.** As a result of treatment in 39 pregnant women showed a significant increase in hemoglobin in the clinical analysis of blood. The high content of ferrous iron in these preparations, their high therapeutic efficacy and good tolerability with minimal side effects allow us to recommend them in terms of standards of proof-based medicine for the treatment of anemia in pregnant women in outpatient conditions.

**Conclusions.** Clinical and pharmacological properties of oral preparations containing ferrous iron and recommended the Ministry of Health of Ukraine have significant pharmacodynamic efficiency, lower incidence of side effects and have advantages over other dosage forms.

## CLINICAL-AND-PHARMACEUTICAL APPROACHES TO SYMPTOMATIC TREATMENT OF GALLBLADDER DYSFUNCTIONS

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**Introduction.** Over the past 20 years, there has been a clear tendency in the world to increase the incidence of hepatobiliary system. There is an increase in the frequency of pathology of the hepatobiliary system at a young age, in women it occurs in 4-7 times more often than in men. According to WHO, every 5<sup>th</sup> woman in Europe suffers from liver and biliary tract pathologies. The gallbladder dysfunction is a disorder of the gallbladder contraction which reveals as biliary pain. Functional gallbladder disorder is defined as biliary pain resulting from a primary gallbladder motility disturbance in the absence of gallstones, sludge, microlithiasis, or microcrystal disease. The prevalence of functional gallbladder disorder among patients with biliary-type pain and a normal transabdominal gallbladder ultrasound is up to 8% in men and 21% in women.

**Materials and methods.** The research covered 133 respondents of different ages and professional areas, which participated in the survey at specially designed single questionnaire formed protocol with regard to problem issues relating to the symptomatic treatment of gallbladder dysfunctions. Standardized poll algorithm was used, what allowed to achieve equality of conditions within the study group. The sociological (questionnaire), clinical-and-pharmaceutical and statistical methods have been applied.

**Results and discussion.** We have found that 36.1% of respondents indicate the presence of the certain problems with health, 29.3% of them feel satisfactory, 6.0% – badly and 0.8% – very badly. The most frequent symptoms of gallbladder dysfunction, which respondents felt recently, were abdominal distension, nausea, sometimes vomiting (57.9%); 39.8% – bitter taste in the mouth, especially in the morning and 22.6% – pain in the right hypochondrium with irradiation to the right arm, shoulder, blade that increases by deep breathing and is induced by eating fat fried food. At the same time, > 30.0% of the interviewed point out to the intensification of the above mentioned by them symptoms during the last 2-3 days which needed the necessity to use the certain medicines for the facilitation of condition and/or referral to specialist. Almost all respondents (94.0%) took certain medicines by themselves, from them ½ (50.0%) resort to the self-prescriptions and self-treatment; 78.0% referred for the advice to the pharmacist in the pharmacy and 28.0% – to the physician. With the goal of self-treatment in 100% of cases the interviewed chose the medicines which are used for the liver diseases and bile passages; 42.1% – medicines for treatment of functional gastrointestinal disorders and 38.2% – complex homeopathic medicines. According to the pharmacist protocols for dispense of over-the-counter medicines, the presence by the patient of the dangerous symptoms requires the immediate reference to a doctor. In our research it has been stated that after having clarified this fact the pharmacist, only in 49.0% of cases, recommended to consult a physician.