

**Aim.** The aim of the study was to analyze the pharmacotherapy of chronic pancreatitis with poly-enzyme preparations. Justify the use of the preparation "Creon" as the most rational alternative pharmacotherapy.

**Materials and methods.** The international recommendations and orders of the Ministry of Health of Ukraine on the treatment of chronic pancreatitis with poly-enzyme preparations have been studied. The pharmacokinetics and pharmacodynamics of the poly-enzyme preparations existing on the Ukrainian market were studied according to the literature data.

**Results and discussion.** In the case of steatorrhea, as one of the most striking symptoms of chronic pancreatitis, therapy is performed with drugs with a high lipase content. According to the order of the Ministry of Health of Ukraine No. 638 dated 10.09.2014 "Unified clinical protocol. Chronic pancreatitis " for the elimination of symptoms of exocrine insufficiency prescribe medications for 25,000-40,000 units of lipase for the main meal and 10,000-20,000 units of lipase for non-essential admission. However, in practice, often used drugs with a lipase content in one tablet (dragee) in the range of 3,500-6,000 units. Accordingly, the minimum effective single dose for correction of steatorrhea will be taking 5-8 tablets (dragees).

If the patient is predominantly a secondary mechanism of development of pancreatic insufficiency, then it should be borne in mind that most of the lipase can be inactivated or not activated. In this case, you should already talk about 20-30 tablets per meal, which is impossible for psychological reasons.

**Conclusions.** The preparation "Creon" is characterized by a high content of lipase and, depending on the form of release, can exhibit medium or high lipolytic activity. To date, of all the polyenzymatic drugs used in pancreatitis, "Creon" is considered the most progressive, having proven clinical effectiveness in pancreatitis. Thus, a high content of lipase provides a more simple and convenient reception, which allows us to distinguish "Creon" as the drug of first choice for rational pharmacotherapy of chronic pancreatitis.

## MODERN PHARMACOTHERAPY OF DIABETES INSIPIDUS

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**Introduction.** Diabetes insipidus is a rather rare endocrine disorder caused by the deficiency of the antidiuretic hormone vasopressin. The disease occurs both in women and in men (40:60), more often in the age of 20-40 years, but can occur at any other age, including children. In the world, 1-3 cases of diabetes insipidus per 100,000 population are recorded. There are about 500 children and adolescents with diabetes insipidus in Ukraine.

The **aim** of our investigation is to study existing recommendations for the pharmacotherapy of diabetes insipidus.

**Materials and methods.** We analyzed the Protocol for the provision of medical care to children suffering from diabetes insipidus, approved by Order № 254 of the Ministry of Health of Ukraine, as well as European Guidelines on the pharmacotherapy of this disease.

**Results and discussion.** Diagnosis of diabetes insipidus is based on clinical symptoms (polyuria, polydipsia etc.) and additional methods of investigation of X-ray examination, CT or MRT of the brain. The main direction of pharmacotherapy of central and idiopathic forms of diabetes insipidus is the appointment of substitution pharmacotherapy with the drug antidiuretic hormone – desmopressin. There are several forms of this drug. Desmopressin in pills (Minirin) contains in one tablet 100 or 200 micrograms. The daily dose is from 1 to 4 pills, which take 30-40 minutes before a meal or 2 hours after a meal. This form of desmopressin contains a dose of the active substance 10 times higher, because it is a partial destruction under the influence of peptidases in the gastrointestinal tract. Treatment starts with minimal doses, with a gradual increase in the dose of the drug depending on the clinical manifestations of the disease. The soluble form of desmopressin is presented as drops in the nose (Adiupressin) or nasal spray (N-desmopressin spray). For day, patient need 2-8 drops in the nose or 1-4 spray doses (10-40 µg). Before

initiating desmopressin therapy, the patient should stop taking other drugs to determine the initial level of polyuria to determine the dose and duration of the reaction to the drug.

**Conclusion.** Having studied the recommendations provided in the Ukrainian protocol for the provision of medical care to children with diabetes insipidus and European Guidelines on the pharmacotherapy of this disease, we determined that the basis of modern pharmacotherapy diabetes insipidus is substitution therapy with antidiuretic hormone with desmopressin.

### **SIDE EFFECTS OF OFF LABEL DRUGS**

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**Introduction.** In most countries in the world where drug turnover (LS) is regulated at the legislative level, medications should be licensed by the regulatory authorities (FDA, HEC) for their use so that doctors and patients can use them.

Before a drug must appear in the pharmaceutical market, a favorable balance between its use and harmful effects must be proven. The purpose of drug licensing is to ensure their use after the registration of high-quality, safe and effective drugs, and also after it has been proven that the benefits of their use prevail over the risk.

**Aim.** In most cases, the use of medication on indications not included in the instruction is prohibited. However, in real medical practice, the appointment of off label drugs is very common in all areas of medicine, and for some drugs it is a common practice, especially in pediatrics, psychiatry and oncology.

**Materials and methods.** Analysis of the normative basis for the use of off-label in Ukraine and in the world.

**Results and discussion.** According to the World Health Organization (WHO), half of all medicines have been prescribed according to indications that were not in the instructions and such use of the drug was called off label. As long as off label medications are effective, safe, well tolerated and relatively inexpensive, their use is not anxiety. However, despite of the benefits of using off label drugs, but the lack of regulation by health authorities, they can create certain risks in this area. Therefore, one of the potential concerns for physicians is that off label medicines do not always have convincing scientific support, which may not always be a known risk from the use of the drug for the patient and the doctor. Sometimes off label use of the medication carries more heightened risks for the patient and the doctor than his counterpart, a registered remedy that has an approved instruction. According to the results of the analytical analysis, the serious consequences of the use of off label medicines develop in 68.2% of the cases, including fatal outcomes - 9.8% of cases (10.4% of them are fatal outcomes in children from 0 to 9 years) The most frequent errors leading to fatal outcomes is the off label of the drug in inadequate doses (40.9%), irrational drug selection (16%) and incorrect route of administration (9.5%). In pharmacology, axioms are adhered to, if the drug is used in different directions of pharmacotherapy, then a higher risk of its toxicity should be expected. The safety of off label drugs is largely due to the risk of their adverse reactions and the particularly high risk of side effects of drugs is associated with the use of off label in children. Many problems in pediatrics arise because of the absence or limitation of evidence of side effects and contraindications to off label drugs, especially for rare diseases in children.

**Conclusions.** Consequently, in the health system, misuse of off label drugs is a serious concern about their safety, especially when the drug is widely used, regardless of the fact that regulators did not determine the risk-benefit ratio for it. Decisions on the prescription of any medications should always be weighed against the potential benefit and the possibility of harm. It must be remembered that prescribing a medicine is one of the most risky actions that a physician performs with a patient.