

Trade names	Excipients							
	MC ¹	CS ²	SC ³	⁴ Gl	⁵ CAM	⁶ P-80	⁷ BCh	⁸ PW
Flix	+ ¹²	+		+	+	+	+	+
Forinex	+	+	+	+	+	+	+	+
Mometasone-Teva	+	+	+	+	+	+	+	+
Sanomen								
Etacid	+	+	+	+	+	+	+	+

Notes: ¹MC – microcrystalline cellulose; ²CS – carmellose sodium; ³SC – sodium citrate; ⁴Gl – glycerin; ⁵CAM – citric acid monohydrate; ⁶P-80 – polysorbate 80; ⁷BCh – benzalkonium chloride; ⁸PW – purified water; ⁹Rialtris – combined nasal spray (olopatadine hydrochloride 665 mcg/ MF 25 mcg); ¹⁰Glenspray Active – combined nasal spray (MF 50 mcg/ azelastine hydrochloride 140 mcg); ¹¹ – dispersed cellulose (microcrystalline cellulose and sodium carboxymethylcellulose); ¹² – Avicel RC-591.

The complex cellular adhesive system of Nazonex® (dispersed cellulose is effective in increasing the MF nasal absorption without any nasal tissue damage or any ciliary dysfunction), as original MF nasal spray provides the best suspension adhesion to the nasal mucosa, having an optimal initial and final suspension viscosity. Due to the special structure of the delivery device, MF distribution in the posterior parts of the nasal cavity is greatest in Nazonex® and is 80%.

Conclusions. When choosing INCSs with MF, you should necessary to consider the excipients of composition. This can affect the effectiveness of therapy.

CLINICAL AND ECONOMIC ASPECTS OF USING PREVENTOR IN THE TREATMENT OF PATIENTS WITH HIGH CARDIOVASCULAR RISK

Troyan D. S.

Scientific supervisor: Dobrova V. E.

National University of Pharmacy, Kharkiv, Ukraine

rashevskayanasty@gmail.com

Introduction. Cardiovascular diseases (CD), especially coronary heart disease, remain the leading cause of disability and death in the world, Europe and, especially, in Ukraine, and are therefore not only a medical but also a socio-economic problem. In Ukraine, the adult mortality rate from CD among all causes of death is 66.5%, the majority of deaths (68.9%) cause of death is coronary heart disease, the pathogenetic basis of which is atherosclerotic coronary artery disease. Despite all the existing international recommendations and domestic protocols governing the appointment of statins to different categories of patients, the situation with the use of these drugs in Ukraine is unsatisfactory.

Aim. To investigate gaps in the provision of medical care in the treatment of dyslipidemia and cardiovascular catastrophes prevention in Ukraine.

Materials and methods. We analyzed epidemiological research, meta-analysis data in the world and results of science research in Ukraine.

Results and discussion. According to the recommendations of the European and American Societies of Cardiologists, the correct strategy for treating dyslipidemia is the use of statins - inhibitors of 3-hydroxy-3-methylglutaryl-coenzyme A reductase (evidence class I, level of evidence A). A meta-analysis of 10 large-scale studies involving about 80,000 patients found that drugs in this class reduced cardiovascular risk by 27%, stroke by 18%, and overall mortality by 15% (Cheung B, 2004). A meta-analysis of Cholesterol Treatment Trialists' Collaborators (90,056 participants) found that a reduction in plasma LDL cholesterol levels by 1 mmol / L did not reduce cardiovascular risk by 20% (Baigent C. et al., 2005). The importance of statin therapy in improving the prognosis of patients with reduce cardiovascular risk cannot be overestimated - these drugs significantly reduce the risk of myocardial infarction, stroke and death. Today, there is convincing evidence of the effectiveness of statin therapy in the prevention of cardiovascular catastrophes not only in the perspective of secondary but also primary prevention. Moreover, the results of a long 20-year follow-up of patients who participated in the WOSCOPS study showed that statin therapy for the first 5 years helps to improve the prognosis in the next 20 years: reducing the overall death rate by 13% ($p = 0.0007$), mainly due to a 21% reduction ($p = 0.0004$) in cardiovascular death.

Despite all the existing international recommendations and domestic protocols governing the appointment of statins to different categories of patients, the situation with the use of these drugs in Ukraine is unsatisfactory. This is evidenced by the results of the SYSTEM study, which was conducted in 11 regions of Ukraine and covered a total of 2964 patients with hypertension (62% had concomitant coronary heart disease, 22% - diabetes, 16% - CKD above 3), showed that the frequency of statins in this cohort was on average 39.5%. However, only in 47% of cases statins were prescribed to patients with coronary heart disease, and the frequency of statin therapy in the presence of diabetes, CKD, cardiovascular catastrophes and a history of stroke ranged from 39.8 to 45.7%. That is, more than half of patients with very high cardiovascular risk do not receive drugs that have perhaps the greatest impact on the prognosis of their lives.

Rosuvastatin is a third-generation synthetic statin that provides a more significant reduction in LDL cholesterol levels than other statins, which allows the target level of LDL cholesterol to be achieved in more patients. The pronounced cholesterol-lowering effect of rosuvastatin is associated with a long half-life (19 hours), which allows you to long block the activity of a key enzyme of cholesterol biosynthesis. Rosuvastatin - one of the few statins, under the influence of which activates the synthesis of the main protein of HDL - apolipoprotein in apo-AI: it increases at different doses from 5 to 15%. Rosuvastatin is superior to all other statins in its ability to reduce the level of proatherogenic lipoproteins (LDL). Its most important advantages are also a beneficial effect on antiatherogenic fractions of lipoproteins (HDL) and a powerful hypotriglyceridemic effect. This reduces the need for the combined use of statins and fibrates, which significantly increases the safety of lipid-lowering therapy. In addition, the effectiveness of the drug in most patients at an initial dose of 10 mg reduces the need for titration compared to other statins, increase adherence to treatment, reduce the cost of therapy. According to a meta-analysis of Pharmaceutical Benefits Advisory Committee, 10 mg of rosuvastatin provides the same reduction in LDL cholesterol levels as 30 mg of atorvastatin. Some features of the pharmacokinetics and pharmacodynamics of rosuvastatin allow us to expect better tolerability of this drug compared to other statins. It should be emphasized that all patients with very high and high cardiovascular risk should receive statins for secondary or primary CVD prevention. Generally, very high-risk patients require high-intensity statin therapy by rosuvastatin 20-40 mg/day or atorvastatin 40-80 mg/day.

Conclusions. Thus, statins are now a mandatory component in the treatment of patients with cardiovascular catastrophes, in order to correct dyslipidemia and reduce cardiovascular risk. The expediency of widespread use of statins in clinical practice is not in doubt today. However, statins are not always used correctly, in adequate doses, which, of course, significantly reduces the effectiveness of their use as a means of preventing severe complications of atherosclerosis.

DIAPER DERMATITIS (DIAPER RASH): PHARMACEUTICAL CARE PRINCIPLES

Tsavaliuk A. V., Otrishko I. A., Zhulai T. S.

Scientific supervisor: Tkachenko K. M.

National University of Pharmacy, Kharkiv, Ukraine

t.kateryna.13@gmail.com

Introduction. Diaper dermatitis (diaper rash) is skin pathological condition of newborns and the first year children that occurs periodically as a result of physical, chemical, enzymatic and microbial factors' exposure to the contact skin area with the diaper. Diaper dermatitis is one of the most common dermatological diseases in newborns and the first year children, the prevalence of which, according to various authors, is from 35% to 50%, and in some countries reaches 75-87%. This disease can cause significant discomfort and stress in both infants and caregivers.

Aim. According to the survey results to assess the awareness of pharmacy visitors about the principles of rational use of skin care products in children.

Materials and methods. Methods of search, collection, analysis, and systematization of information, as well as observation and pharmacy visitors survey were used.

Results and discussion. At any stage of the diaper dermatitis treatment, it is extremely important to comply with pharmaceutical care principles. So when identifying life-threatening symptoms in acute exacerbation of diaper dermatitis, children have to be consulted by a pediatric dermatologist. One of the main obstacle on the diaper dermatitis positive treatment result is inadequate and irregular care of the baby skin (insufficient hygiene procedures, infrequent diaper changes, and irrational use of water, liquid soap, detergents, antiseptics and baby powder). By the research data, half of the surveyed parents (47% of all respondents) have a tendency to systematic violation the elementary rules of rational baby skin care. Unfortunately, the overwhelming majority of respondents (78% of all respondents) are not satisfied of their baby skin condition.

Conclusions. Diaper dermatitis (diaper rash) treatment should be comprehensive with considering the individual manifestations of each child. In case of complicated or prolonged diaper dermatitis, a pediatric dermatologist have to be consulted. The key point in the diaper dermatitis prevention is to maintain the barrier skin function: ensuring its dryness, friction reducing, maximum contact time limitation with urine and feces, as well as the optimal use of local prophylactic agents. Equally important are the recommendations for non-pharmacological treatment, namely, breastfeeding, frequent diaper changes, exact selection of diapers by size, and gentle skin cleansing, etc.