

SOME SAFETY ASPECTS OF ACUTE RHINOSINUSITIS TREATMENT: THE ROLE OF THE PHARMACIST IN EPOS 2020

Ali Moataz F.G., Mohamed Ahmed R.N.

Scientific supervisors: Otrishko I.A., Zhulai T.S.
National University of Pharmacy, Kharkiv, Ukraine
tszhulay2910@gmail.com

Introduction. Acute rhinosinusitis (ARS) management in Ukraine are regulated by European guideline – European Position Paper on Rhinosinusitis and Nasal Polyps (EPOS 2020). EPOS 2020 is addressed not only to doctors but also to pharmacists and patients, who often make the first attempts at treatment with OTC drugs, frequently based on the recommendations of pharmacists.

One of the most common drug groups is nasal decongestants (ND) - vasoconstrictors that can be used orally (systemic decongestants) or topically (topical, nasal decongestants). It should be noted that most of the drugs in this group are over-the-counter drugs. The mechanism of action of all decongestants is the same: they constrict the vessels of the nasal mucosa, as a result, edema and mucus hyperproduction by goblet cells decrease. The main purpose of using these drugs is ARS symptomatic therapy: relieving nasal congestion and preventing or treating complications (for example, acute otitis media). Decongestants are sympathomimetics: selective α_1 - and α_2 -adrenergic receptor agonists, nonselective α_1 - α_2 -adrenergic receptor agonists (over-the-counter drugs) or nonselective α - β -adrenergic receptor agonists (prescription drugs, have a high risk of side effect development, in particular the effect on the central nervous system). Fundamentally important points regarding the nasal decongestants' safe use, especially in children, is the drug's action duration which determines the frequency of use per day. NDs are toxic to ciliary epithelial cells of the nasal mucosa, can damage the nasal mucosa, inhibit mucociliary transport, and increase the risk of medication rhinitis with prolonged use. It is important to note that especially in children, despite the topically drug-form, systemic negative effects (side effects) may occur, some of which are associated with the resorptive effect of drugs.

Aim. To assess the awareness based on the questionnaire results of pharmacy visitors about the principles of NDs safe use in various dosage forms.

Materials and methods. The practical part of this study was done in collaboration with Municipal Enterprise of Kharkiv regional council «Regional pharmacy warehouse» №1 in Ukraine. We realized the analysis of 83 questionnaires of visitors with ARS symptoms (nasal congestion, rhinorrhea, headache and other symptoms according to EPOS 2020) with separate on ARS phenotypic forms of (viral, post-viral and bacterial ARS).

Results and discussion. Many NDs for topical use are registered in the State Register of Medicinal Products of Ukraine, but the most popular were naphazoline (18%), xylometazoline (22%) and oxymetazoline (36%). The most popular, and the only, ND for systemic use was the combined drug «Mili Nosik» (chlorpheniramine maleate and phenylephrine hydrochloride) (9%). The overwhelming majority of the pharmacy visitors were not informed about NDs safe use (91%) and did not consider this information important (67%). Of all aspects of NDs safe use for pharmacy visitors, the most important information was the choice of concentration and dosage form (22%), the rules for using the dosage form «nasal drops» (18%) and contraindications for use (16%). The most unimportant («useless») information was the duration of NDs use (10%), use in childhood and drug-drug interactions (9%). Only 40% of respondents considered that information about NDs safe use is important and useful for self-care in the future. This negative trend indicates on low compliance of patients to treatment since safety aspects are one of the important components of this process.

Conclusions. Taking into account all the above, all participants in the treatment process (patient - pharmacy visitor - pharmacist - doctor) should remember that when we use NDs is the so-called «despair therapy» (use as rarely as possible), when choosing dosage form and drug concentration take into account the age of the patient, strictly follow the instructions for medical use of medicine and if symptoms of overdose occur, you have to have medical help immediately. Based on the study results, a pharmaceutical care scheme for the rational use of NDs was developed.

ALTERNATIVE COLLECTION FROM MEDICINAL RAW MATERIALS FOR COMPLEX PHARMACOTHERAPY OF PATIENTS WITH HIGH BLOOD PRESSURE

Alimbatyrov M.R.

Scientific supervisor: Tulebayev Ye.A.

NCJSC "Medical University of Karaganda", Karaganda, Kazakhstan
alimbatyrov2000@mail.ru

Introduction. World practice has shown that in modern conditions, the safety, efficacy and availability of pharmacotherapy can be achieved through the joint efforts of a doctor and a clinical pharmacist. Clinical pharmacy is an integrative vector-applied science linking the pharmaceutical and clinical aspects of drug treatment. In the Republic of Kazakhstan, in addition to a general practice pharmacist (pharmacist), a pharmaceutical production engineer and a quality management manager in pharmacy, new positions have been approved, such as: clinical pharmacist and radiopharmacist, pharmaceutical inspector. According to this order, the duties of a clinical pharmacist include: organizing work with medical workers to provide clinical and pharmaceutical services in medical organizations, information and advisory assistance on the rational use and use of drugs and medical devices; conducting pharmaco-economic analysis, control over the conduct of pharmacotherapy by selecting drug therapy for patients, offers analog substitution, etc.

Hypertensive disease has recently begun to occur very often among young people. It is characterized by an increase in blood pressure, which contributes to disorders of the internal organs and urinary, nervous and cardiovascular systems. In hypertension, called in clinical practice as arterial hypertension, blood pressure goes beyond 140/90 mm Hg.

The authors of this manuscript proposed the composition of the collection of promising medicinal plants for the complex treatment of patients with high blood pressure in the early stages. Various effects of these plant species on the body are discussed, including antispasmodic, sedative and diuretic effects. Treatment regimen and periods have been suggested.

Aim. For the complex treatment of arterial hypertension in the early stages in clinical practice, suggest a suitable composition of the recipe for collection, containing certain types of medicinal herbal raw materials.

Materials and methods. Analytical and descriptive research methods were used. According to the clinical protocol of the Ministry of Health of the Republic of Kazakhstan (hereinafter, MH RK), the following pharmacotherapeutic groups are used for drug care for arterial hypertension: angiotensin converting enzyme inhibitors (ACE inhibitors), angiotensin II receptor antagonists (ARA II), Thiazide and thiazide-like diuretics, calcium channel blockers (CCBs), loop diuretics, aldosterone antagonists, β -adrenoblockers (β -AB) and centrally acting drugs, as well as their combinations: ACE inhibitors + diuretics, ARA II + diuretic, ACE inhibitors + CCB, ARA II + CCB, CCB + diuretic, β -AB + ACE inhibitors and others. Despite their impeccable practice in