Materials and methods. Using search engine PubMed, we processed information of more than 100 scientific works from the period 2001-2021 years. After entering keywords “hemolytic jaundice” there were 43 046 positions, the next step was to add search terms “hemolytic jaundice symptoms”, “hemolytic jaundice causes and diagnosis” and limit the time period because the PubMed offers users numerous powerful search filters.

Results and discussion. Hemolytic (pre-hepatic) jaundice occurs as a result of increased hemolysis and is not associated with liver damage. The body does not have time to utilize bilirubin, which is formed from heme, which causes an increase in its level in the blood. As a result of hyperbilirubinemia, yellowness of the skin and mucous membranes is noted. The reasons leading to this condition may be hemolytic poisons (phenylhydrazone, arsenic hydrogen, snake venom, etc.), congenital and hereditary abnormalities of erythrocytes and hemoglobin, damage to erythrocytes by various toxins and microorganisms, autoimmune damage to erythrocytes after transfusion of incompatible blood group. The hemoglobin released during hemolysis as a result of redox transformation turns into bilirubin, which is formed in such a large amount that it does not have time to be metabolized and excreted by the liver.

The basic way of diagnosis evaluation are laboratory tests. These include bilirubin tests: the high level of unconjugated bilirubin compared to level of conjugated bilirubin suggests hemolytic jaundice, also it is rational to determine erythrocytes and hemoglobin levels in blood.

Conclusions. The main reason for the hemolytic jaundice symptoms manifestation is the indirect bilirubin significant level. There are several factors that can contribute to hemolytic jaundice development: hereditary defects in erythrocytes and hemoglobin; the presence of toxins or pathogens; extensive heart attacks or hemorrhages; mechanical damage of erythrocytes in the vessels.

ALLERGIC REACTIONS TO MEDICINES AND THEIR PREVENTION

Kuchmuk D.A.
Scientific supervisor: Rybak V.A.
National University of Pharmacy, Kharkiv, Ukraine
s09915248@gmail.com

Introduction. Along with the creation of new compounds and standardization of treatment of many diseases, the prevalence of side effects of drugs is progressively increasing, and, accordingly, drug allergies. Drug allergies are defined as an adverse reaction (allergic reaction, hypersensitivity) under conditions of adequate and proper

use of drugs, which are based on immune mechanisms. An allergic reaction to medication always precedes the period of sensitization, when the primary contact of the body's immune system and medicines occurs. A medicinal allergic reaction develops only to reintrodies drugs.

Hypersensitivity reactions to medicines affect more than 7% of the total population, therefore, pose an urgent problem for the healthcare system. Treatment of medical allergies over time presents a difficult task, so it is easier to avoid than to treat.

Aim. Study of the features of drug allergy and its prevention.

Materials and methods. The analytical, logical, generalization methods were used in the work.

Results and discussion. According to modern views, absolutely any drug with a probability of 1-3% can cause drug allergies, although, its most common causes are antibiotics, local anesthetics, vaccines, serums, blood substitutes, analgesics, vitamins, non-steroidal anti-inflammatory drugs, other medicines of a protein nature (hormones, immunoglobulins), X-ray contrast diagnostic tools.

In the development of drug allergies, cross sensitization is also important, caused by the chemical affinity of medicines, which is most often found among antibacterial agents. According to the Center for the Study of Side Effects of Drugs, 70% of all adverse reactions to medicines are allergic, their mortality reaches 0.005%. According to the summary data for a number of countries, drug allergies are found in 8-12% of patients, and there is a wide increase in the number of allergic reactions to drugs. The basis of drug allergies are immune mechanisms, which significantly distinguishes it from toxicoallergic and pseudoallergic reactions.

Immunological mechanisms are represented by 4 types: reaginal, cytotoxic, immunocomplex, slow hypersensitivity and have immunological, pathochemical and pathophysiological stages. In 77% of patients, drug allergies develop according to the reactin type of immunopathological reactions, in 5% – by immunocomplex type, and in 9% – corresponds to the hypersensitivity of the slow type. The course of medical allergies can also occur simultaneously according to several mechanisms.

Hypersensitivity reactions to drugs are adverse effects of drugs (active substances and fillers) that clinically resemble allergies. In case of confirmation of a certain immunological mechanism, these reactions should be classified as drug allergies.

Careful evaluation and selection of the drug is the basis for the prevention of possible complications of drug allergies. In addition, we must not forget about the risks and negative consequences of self-medication, namely: the threat of late visit to the doctor, and as a result, the high probability of complications of the disease, the high risk of medical complications.

Conclusions. The final diagnosis of hypersensitivity reactions makes it possible to introduce more targeted preventive measures. One of the most important

preventive measures is to prevent possible cross reactions. Regardless of the intensity of the clinical reaction, if hypersensitivity to a particular drug is detected, a more serious reaction may develop in the future.

ATRIAL NATRIURETIC FACTOR: A HORMONE SECRETED BY THE HEART

Laghribi Fouzia
Scientific supervisor: Krasilnikova O.A.
National University of Pharmacy, Kharkiv, Ukraine
l.fouzia25@gmail.com

Introduction. Atrial natriuretic peptide (hormone) or ANP is a member of a family of peptides that have important roles in regulating blood pressure, most prominently through their activity in the kidney to promote excretion of water and sodium. A majority of ANP is synthesized and secreted from cardiac muscle cells, particularly in the atria. Like the kidney, the heart plays an important role in regulating salt and water balance. This function is mediated mainly by a cardiac hormone, atrial natriuretic peptide or factor (ANP or ANF). But the biological role of ANP is not fully known yet.

Aim. The aim of this investigation is to characterize the main functions of ANP in the body, as well as the main ways of its application in medicine and pharmacy.

Materials and methods. Special scientific literature was analyzed, in particular, review and practical articles, and also analyzed the main methodological approaches to the determination of NP, on which its application in medicine is based.

Results and discussion. ANP is synthesized as an inactive preprohormone. The preprohormone is activated via post-translational modification that involves cleavage of the 25 amino acid signal sequence to produce proANP, a 126 amino acid peptide that is the major form of ANP stored in intracellular granules of the atria. ANP acts on the kidney to increase sodium and water excretion. ANP has the opposite effect of angiotensin II on the kidney: angiotensin II increases renal sodium retention and ANP increases renal sodium loss. ANP stimulates vascular smooth muscle relaxation in arterioles and venules by a few mechanisms. It induces membrane receptor-mediated elevation of vascular smooth muscle cGMP and inhibition of the effects of catecholamines. ANP promotes uterine spiral artery remodeling, which is important for preventing pregnancy-induced hypertension. ANP is produced locally by several immune cells. ANP is shown to regulate several functions of innate and adaptive