

The distinctive feature of cuffs of firm Little Doctor is causing of marking (size of cuff, mark of "ARTERY", mark of "INDEX" by the indelible chrome (of LD2) or white (LD80).

Exactness of measuring of blood pressure strictly depends on accordance of cuff to the sizes of arm circumference consumer. Choice of size of cuff validated thus: since a cuff on put on a shoulder the mark of "INDEX" must specify on the mark of "Normal".

Conclusions. The commodity science assortment of Cuff firm Little Doctor showed the presence of wide assortment, including the presence of cuffs for newborn and babies. All cuffs have marking of size, and additional inscriptions that specify on the rightness of putting on and choice of size.

SALT INHALER – MODERN APPARATUS FOR INHALATION THERAPY AT HOME

Levchenko M. M.

Scientific supervisor: as. Bezpala Yu. O.
National University of Pharmacy, Kharkiv, Ukraine
pacha637@gmail.com

Introduction. At the end of the 20th century, the number of cases such diseases like asthma, allergic rhinitis and other diseases associated with respiratory tract increased significantly. The main reason for this is a large number of factors of air pollutants which every day "attack" our respiratory system.

So, get away thereof we cannot practically, then we have to "cleanse" our respiratory tract by yourself. This usually helps us as nature, such as rock salt cave, or rather its crystals. This will help us stone cave salt, or rather, its crystals.

The benefits of salt as a natural cleanser have been known for millennia. The benefits of salt air inhalation, also known as speleotherapy or halotherapy, were first documented over 200 years ago in Europe when it was realized that salt miners were relatively free of respiratory ailments. Since then, many people have been flocking to salt mines around the world to help rid themselves of respiratory ailments of all kinds including asthma, congestion, hay fever, and allergies. Salt is known for its anti-microbial, anti-bacterial, and anti-fungal properties. Also, such treatment only begins to become more widely known and appreciated by the introduction of "salt rooms" in spa and other health institution.

Aim. The aim of our study is to study the structure and application features of using a salt inhaler at home.

Materials and methods. A review of the scientific literature, using the descriptive, searching and logical methods.

Results and discussion. Salt inhaler is a modern apparatus that allows you to create a microclimate of cave salt at home for individual use. Regular use of salt inhaler: helps to reduce the frequency of respiratory infections, improves life quality, promotes bronchial drainage, helps to bring a natural asthma relief, reduces snoring, deepens breath capacity, promotes mental calmness, detoxifies air, moisturizes dry mucous membranes.

It consists of a ceramic or polymer body, inside which between two filters is located combination of natural salt crystals (NaCl – 98,7%, CaSO₄ – 0,1%, MgCl₂ – 0,028%, CaCl₂ – 0,13%, Fe₂O₃ – 0,00056 %, as well as in small quantities K, I, Br) and hole for passing air. Also on the body inhaler present a colorful user-indicator.

When using a salt inhaler, you should stand by the next recommendations:

1. For best results, inhale through your mouth and exhale through the nose.
2. Breathing must be natural.
3. Do not recommended to breathe back into the device
4. After the use, clean the device with a dry cloth on the outside only. As the mechanism may get damaged by exposing the salt crystals to moisture. And not to use any type of liquid while cleaning
5. Store in a dry place and keep away from direct sunlight.
6. Salt inhalers are intended only for individual use.

Conclusion. Salt inhaler is an analogue of the «salt room» only at home. It is an indispensable apparatus which the help of which it is possible carrying out inhalations as in free time and in any place,

not only for the treatment of diseases associated with the respiratory tract, but also their prophylactics (for example, after staying in a large group of people in time seasonal illnesses).

SPECIAL PHARMACEUTICAL PACKAGING WITH FUNCTION OF «PROTECTION» FROM CHILDREN

Nesterenko T.O.

Scientific supervisor: as. Bezpala Yu. O.
National University of Pharmacy, Kharkiv, Ukraine
tovaroved@nuph.edu.ua

Introduction. As you know, children often show an increased interest in packaging with drugs and their contents. According to statistics from EU member states, it was found that every year more than 100,000 of child poisoning cases exactly tied with drug. Particularly subject to such poisoning are children aged 1 to 5 years. Still fifty years ago, in the USA, the state began to improve the type of drug packaging, when pediatricians started talking about the alarm about the numerous cases of drug poisoning and raised the question of the need to protect children from such dangers.

The first step was to reduce the number of tablets in a package. It did help decrease the severity of the poisoning, but the number of incidents remained the same. Then efforts were directed to that the package received "Protection" function.

In 1970, the United States received the «Poisons Prevention Packaging Act» (PPPA), the world's first normative act, which contained requirements for packaging that was safe for children. Special packaging must be manufactured in such a way that a child under the age of 5 years, will find it difficult to open and get out its toxic or dangerous to the health substance. At the same time, the use of the package should not be difficult for an adult.

PPPA also contains a list of substances that must be safely packed for children. In Europe, there are also documents containing such requirements and a list (for example, Directive 1999/45 / EC).

Aim. The aim of our work is to study modern packaging with the function of "protection" from children.

Materials and methods. During our research, we reviewed scientific publications in the pharmaceutical industry; analyzed the main international and European normative documents on the regulation of quality requirements and safety of packages with drugs for children.

Results and discussion. In last years, packaging developers have proposed a range of innovative drug packaging designs that provide protection from children's access:

Dial-Blister – the capsule can be pushed out only after the blister is turned to the correct position, align the capsule from the point of gap of the blister

Blister Peel-Push. In order to press out the tablet out of the blister through the foil, you must to remove the protective film from the corresponding segment.

Slide-Pack- Blister. Between the foil through which the tablet pressed out and cells with tablets laid protective plate. Only by moving the tablet exits.

Tear- Blister The tablet is not squeezed out of it, but get out when the segment is incised in a certain place.

Medi-Lock-Box. The packaging design is such that it can be opened only at the same time by pressing certain points (like opening the lock). In this case, it is calculated that for children's fingers such a task cannot be done.

Today there are standards – DIN EN ISO 8317 (Child-resistant packaging – Requirements and testing procedures for reclosable packages) and DIN EN 14375 (Child-resistant non-reclosable packaging for pharmaceutical products – Requirements and testing), which regulate the requirements for packaging of drugs safe for children. These documents are interesting because they control not only the safety of the packages for children, but also the convenience of using them for both adults and the aged

Conclusions. By developing new types of packaging, pharmaceutical manufacturers not only fulfill regulatory requirements, but also offer consumers important quality advantages. After all, modern packaging should in the first place ensure safety for children and at the same time be easy to use for the rest.