

Nowadays, methods of high-intensity laser therapy, cryodestruction, and external drugs (for example, silicone gels) are widely used for the treatment of colloidal scars.

Aim. Analyze the quality of current treatments for keloid scars and evaluate their cost.

Materials and methods. Bibliosemantic and statistical analysis of the literature data were used to analyze the quality of a keloid scar treatments. An assortment of existing procedures for the correction of colloidal scars in Ukraine, their advantages and cost were analyzed.

Results and discussion. Currently one of the most effective and popular method of getting rid of cicatrices and scars is a laser. With the laser, the scars disappear completely; of course, it takes 3-5 sessions. The quality of treatment depends on the size, depth and age of the scar. The method of treatment ends in that the high-energy laser beam is directed to the damaged area of the skin, this radiation is divided into several microscopic rays, which form a kind of grid. These rays penetrate deep into the skin up to 1 mm, allowing you to completely remove even the deepest scars. The laser does not affect the entire skin but only the scar tissue, so that the adjacent tissues remain absolutely intact. Due to the rays, all the metabolic processes are activated, collagen in the deep layers of the skin begins to develop at a tremendous speed, scar tissue begins to nourish, and from it a new beautiful and smooth skin is formed. Advantages of this method – the guaranteed qualitative result, the skin is not subject to unnecessary traumatization, there is no recovery period, the removal procedure does not require anesthesia or the use of any painkillers, the absence of burns or any hematomas after the procedure, lasting effect. In Ukraine, this method of treatment can cost from 500 to 3000 UAH. depending on the area of the scar.

The method of treatment with cryotherapy is that the cryogen is treated with damaged tissue, as a result of damage to the microcirculatory bed and the death of cytoplasm and organelles of cells caused by intracellular and intravascular formation of ice crystals (affected -50°C - -60°C). During thawing in cells, the concentration of electrolytes increases, which upon re-cooling the tissues is accompanied by an even greater crystallization, accelerating their death. The procedure is painless and therefore does not require pain relief – the patient only feels cold on the treated surface. After the procedure, the skin at the treatment site is restored within 2-4 weeks. Advantages of the method – reduced doses for medical anesthesia or its absence, since low temperatures act as a natural anesthetic, removal of inflammatory and swelling phenomena, hyperemia, pain, normalization of lymph flow, exception of relapses: after removal of the formation by cryodestruction, do not extend to adjacent areas, the activation of blood circulation, significantly increases the supply of tissues with oxygen and nutrition. The price policy of this method of treatment is from 280 to 1200 UAH.

The method of treatment with silicone gels is to moisten the scar, compress the capillaries, reduce the development of inflammatory mediators, reduce the synthesis of collagen due to oxygen starvation. The advantage of this method is that it greatly improves the appearance of scars, quick effect, silicone gels are well applied to all areas of the body, including the face, joints and bends, gel forming an invisible film and dries quickly. For example, on the Ukrainian market there is a silicone gel “Dermatix” (manufacturer-manufacturer of Advanced Bio-TECHNOLOGIES Inc., USA), which costs on average 750 UAH.

Conclusions. Analysis of current treatments for colloid scars has shown that the most qualitative and expensive methods are laser therapy and cryotherapy. Drugs for external use are cheaper, give a quick but short-term effect.

ANALYSIS OF THE APPROACHES FOR WEB SITE CONTENT PRESENTATION FOR THE NETWORKS OF PHARMACIES IN UKRAINE AND BELARUS

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Introduction. The modern level of the society development makes the web-sites the main source of the information. The pharmacy networks are use the Internet technologies for promotion of their

services. However, the proper presentation of the information on the web-site facilitates the search of the required information and attracts more clients to use on-line services. The later increases the outcome of the company as well.

Aim. The aim of this research is to find the main principles of web-sites construction and the main ways of the information presentation for Ukraine and Belarus.

Materials and methods. The information from the open Internet sources of over than 20 web sites of the pharmacy networks in Ukraine and Belarus.

Results and discussion. All the sites (100%) of the pharmacy networks in Ukraine and Belarus are corporative web sites. Those sites have many functions and well-developed usability. Most of the sites of the pharmacy networks (95%) can match the screen of the user's device. All the web sites have the same template called "HEADER". It presents the company name, its logo, contact information, main menu and the language switchers buttons. The style of corporation is followed in all cases (100%) of site design. The developers in many cases apply the modern "SLIDE" technology not only for presentation of photos but also used for video information. For instance, the SLIDER of the biggest pharmacy network in Belarus — RUP «BELPHARMATSIYA» covers the whole screen. The so-called "carousel" algorithm does switching between slides on these web sites.

An interesting example of improved services given via the Internet is suggested by Pharmaceutical company Magnolia Pharmacy Chain; its name is GeoApteka and it allows excess to the latest information about the prices, availability of the drugs, and the location of the nearest pharmacies, where the required items can be found.

Conclusions. The analysis of the latest trends of information content for the largest pharmacy networks of for Ukraine and Belarus showed that the companies support them in a proper way. They use the latest innovation for improvement of their web sites. Therefore, the presentation of the information meet the latest standards of the proper web site design.

MATHEMATICAL MODEL OF ANTIMICROBIAL DOSING ON ESCHERICHIA COLI

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Introduction. For today an actual problem in medical and pharmaceutical sphere is development of mathematical model of the maximum efficiency of antimicrobial preparations, and also the minimum risk of occurrence of organism to their stability.

Aim: To evaluate the effect of two antimicrobial dosing regimens developed on Escherichia coli, in particular, enrofloxacin.

Materials and methods. Scientific medical-pharmaceutical literature and publications in recent years were used to analyze the research.

Results and discussion. As you know, mathematical modeling is a process of building and studying mathematical models, which, in turn, are a virtual mathematical structure, created on the basis of experimental data and possessing all the properties of a real object. With the help of mathematical models it is possible to find with high accuracy the optimal decisions, to predict possible outcomes of these or those processes, to make the most informed decisions.

The analysis of scientific literature has shown that with the help of mathematical models it is possible to determine the synthesis of pharmacology and innovative statistical methods, to conduct a quantitative analysis of data on the effects of the drug and the development of diseases, both at the population and individual levels. At the same time, it is also possible to use the maximum amount of information to understand the processes taking place between taking the drug and the response of the body.