## APPLICATION OF PREPARATIONS OF DIFFERENT FORMS OF HYALURONIC ACID IN AGE CORRECTION PROGRAMS

Kovtun O.O., Boyko O.O, Burkova G.O. National University of Pharmacy, Kharkov, Ukraine svetabobro1@gmail.com

**Introduction.** Due to the variety of forms, hyaluronic acid (HA) can be used for special solutions to several facial problems. The emergence of injectables in the early 1980's was a real revolution in our relationship with aesthetic medicine. If before these were complex interventions that required hospitalization and a long time to recover, now such procedures can be performed in the clinic for the time required for the lunch break.

**Aim.** It is to summarize the data on the analysis of drugs of different forms of hyaluronic acid in age correction programs.

**Materials and methodsh.** The methods of search, analysis and generalization of data from information sources and Internet resources of system and comparative analysis are used in the work.

**Results and discussion.** Forty years of monitoring the use of HA-based gel is a sufficient period to critically evaluate and analyze the various methods of its application: The study showed that the production of collagen, elastin and HA in epithelial cells slows down at the age of 25-30 years. Therefore, such care procedures are recommended for prevention, especially at a young age.

*Picotage*. This is a minimally invasive facial treatment that prevents aging. The beautician makes a series of microinjections based on HA with a depth of 2-3 millimeters in the papillary layer of the dermis, with a large number of cells, which is most susceptible to the harmful effects of sunlight.

*Biorevitalization.* This is a regenerative care procedure that prevents aging, which aims to stimulate the production of collagen and elastin. Recommended after 30 years, when the first skin defects associated with aging are detected. The procedure involves deeper than injections, microinjections into the reticular layer of the dermis, which has fewer cells and more fibers. As a rule, other active components are added to the GC.

**Conclusions.** 1. Thus, the correction of involutional changes in facial skin using high-tech methods is an urgent problem, the solution of which will improve the quality of treatment and prevention care and customer satisfaction.

2. Thus, we can conclude that the development of schemes for the correction of age skin, which would perform the tasks and be moderate in price, is relevant for the Ukrainian market of cosmetology.

## RELEVANCE OF THE CREATION OF BURN TREATMENT GEL WITH CALENDULA

Moskalenko T. M., Yuryeva G. B. Scientific supervisor: Yarnykh T. G. National University of Pharmacy, Kharkiv, Ukraine yurieva.anyuta@gmail.com

**Introduction.** Guarding the muscles, bones and internal organs, skin is the largest organ of the body. Our life style can take a toll on this outer covering every day: shaving; exposure to sun, wind and

cold weather; minor burns; cuts and scrapes; rashes and insect bites, etc. One of the most versatile, frequently needed and economical finds of natural origin to help relieve these skin irritations is Calendula.

The flowers of the *Calendula officinalis* plant, also known as the Garden marigold, have been used topically for generations to naturally heal skin irritations. As the active ingredient in topical medicinal forms calendula temporarily protects and helps promote healing of burns.

**Aim.** To justify the performance and perspectives of creating a soft dosage form - gel with calendula for the topical treatment of burns.

**Materials and methods.** Calendula officinalis was chosen as the object of the study. Methods of analysis of literature data about usage of gelling agents for the creation of soft medicinal forms were used.

**Results and discussion.** Currently, the use of gels of acrylic polymers in the preparation of dermatological topical drugs, which are widely used in pharmacy preparation in Ukraine, is very relevant and promising.

In this case, petrolatum-containing bases are most often used, which have a number of negative properties: a violation of many functions of the skin (heat, moisture and gas exchange), an allergenic and sensitizing effect. In some cases, petroleum jelly causes irritation, severe eczema and dermatoses. Ointments with petroleum jelly are very poorly removed from the skin surface, stain clothes, etc. The same applies to a certain extent to the hydrophobic components of ointment bases related to petroleum jelly. Delivery of drugs to the skin is an effective and targeted therapy for local skin diseases. Topical gel formulations are a suitable drug delivery system because they are less oily and can be easily removed from the skin. Gels are semisolid drugs, which have an external solvent phase, may be hydrophobic or hydrophilic nature.

**Conclusions.** In this regard, the development and analysis of gels with the replacement of petroleum jelly in them with gels of lightly cross-linked acrylic polymers is relevant. It will significantly improve the quality and safety of these drugs, reduce their cost and improve working conditions.

## DEVELOPMENT OF HOMEOPATHIC MEDICINES OF ROSEMARY

Oleshko A. Yu., Yuryeva G. B. Scientific supervisor: Yarnykh T. G. National University of Pharmacy, Kharkiv, Ukraine yurieva.anyuta@gmail.com

**Introduction.** Rosemary (*Rosmarinus officinalis L.*) is an evergreen bushy shrub, which grows along the Mediterranean Sea, and sub-Himalayan areas. In folk medicine, it has been used as an antispasmodic, mild analgesic, to cure intercostal neuralgia, headaches, migraine, insomnia emotional upset, and depression. Rosemary has significant antimicrobial, anti-inflammatory, anti-oxidant, anti-apoptotic, anti-tumorigenic, antinociceptive, and neuroprotective properties. Furthermore, it shows important clinical effects on mood, learning, memory, pain, anxiety, and sleep. In ancient Greece and Rome, rosemary was thought to strengthen memory. Research indicates that inhaling rosemary oil helps prevent the breakdown of acetylcholine, a brain chemical important for thinking, concentration and memory.