TO THE PROBLEM OF MODERN METHODS OF FIGHTING SKIN AGING

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In the modern rhythm of life, the problem of premature skin aging is becoming increasingly important. Since the fight against the phenomena associated with the skin aging is one of the main tasks of cosmetology, the development of effective methods of solving this problem is a leading topic of scientific research in both dermatology and cosmetology [1].

The aim of the thesis is to analyse the factors of skin aging, determine the main signs accompanying different types of skin aging and focus on the most effective methods to fight the aging process.

Aging is an inevitable biological process that develops with age and is characterized by a gradual decrease in the functional and adaptive capacity of the organism. The time of onset of old age is a general, conditional and individual concept, the perceptions of it change with increasing life expectancy [2]. The tissues involved in the formation of a person's appearance are the skin, as well as some muscles including facial muscles of the face and neck. Usually, the biological aging process of human skin begins at the age of 25 due to various factors, such as sunlight, mechanical factors, ecology, climate change, etc., genetic predisposition or disturbance of hormonal processes in the body, and lifestyle.

There is natural and premature aging. Premature aging of the skin contains a set of signs of age-related changes in the body as a whole including the skin as well, which can be corrected using modern cosmetic techniques. Factors of natural and premature aging include: endogenous (genetic features, autotoxins, endocrine disorders) and exogenous (UV radiation, ecology, lifestyle, chronic stress, etc.). To choose the proper method of fighting aging it is necessary to be aware of types of skin aging, which are listed below.

Chronological, or natural, biological type of skin aging is associated with the natural biological process of skin aging under the influence of time. It is impossible to completely stop this process, but such aging can be slowed down by changing lifestyles, giving up bad habits, including healthy foods, detoxifying the body. The signs of chronological aging are decreased skin turgor, dryness, exhaustion, the formation of deep wrinkles, omission of the oval face, the appearance of vascular asterisks, hyperpigmentation, erythema of the face, etc. [3].

Menopausal, or hormonal type of skin aging is associated with menopause. It is characterized by a decrease in the concentration of the estrogen. The signs of this type of skin aging are hypersensitivity of the skin, dehydration, pigmentation, hirsutism and wrinkles. In order to protect the skin from hormonal skin aging you need to monitor your hormonal status, as well as use cosmetics that can activate the skin's hormone receptors [3].

Photoaging is a type of skin aging associated with ultraviolet radiation. This process occurs under the influence of ultraviolet rays and leads to destructive changes in all layers of the skin. The signs of photoaging are excessive dryness of the skin, decreased elasticity, the appearance of deep wrinkles, pigmentation, the appearance of keratoma, benign and malignant tumours. Therefore, it is necessary to use products with SPF factor, to avoid tanning beds or use it in moderation [3].

Each type of skin aging is accompanied by signs that can also be classified into some categories: 1) "tired face" occurs in the early stages of aging and characterised by decreased skin turgor, swelling, pasty face, mainly due to impaired lymph flow. In this type there are already changes in facial muscle tone; 2) "wrinkled face" is characterized mainly by

degenerative-dystrophic changes on the part of the epidermis and dermis. The result is multiple small wrinkles that remain in a state of facial rest, dry skin, the appearance of such a symptom as large porosity of the skin; 3) deformation or coarse wrinkle type is characterized by decreased skin elasticity, facial muscle tone, impaired lymphatic outflow, as well as venous stasis. The configuration of the face and neck changes are violation of the oval line of the face, sagging skin of the upper and lower eyelids, the appearance of "double" chin, the formation of deep folds and wrinkles. This type is typical of people with well-developed subcutaneous fat; 4) the muscular type of aging is characterized by a decrease in the volume of subcutaneous fat. Representatives of this type initially have well-developed facial muscles and a weak subcutaneous fat base. Against the background of age-related changes, there are observed facial wrinkles in the corners of the mouth, forehead, deep nasolabial folds.

Today there are a sufficient number of methods of surgical and non-surgical correction of the skin, in particular therapeutic cosmetology (peels, cell therapy, massage, antioxidant therapy, injections, etc.), surgical cosmetology (plastic surgery, endoscopic lifting) and hardware cosmetology (iontophoresis, laser therapy, hardware massage, etc.). Non-invasive methods of obtaining noticeable results of tissue repair and skin rejuvenation are of particular interest. From 25 years of production of your own collagen which task is the preservation of elasticity and recovery of the skin, gradually decreases. Therefore, to replenish its sufficient level, you need to use cosmetics containing collagen hydrolysate (fibrillar protein product obtained by enzymatic or chemical hydrolysis) because "pure" collagen is not used in cosmetics. Also, you need to include in your diet green vegetables that are rich in chlorophyll, strawberries and cranberries for the natural synthesis of your own collagen.

Among cosmetic procedures in the fighting aging, botulinum therapy is the leader. The procedure is performed by introducing botulinum toxin type A, which relaxes the muscle we need, smooths wrinkles and controls facial expressions. This procedure is also used for medical purposes, such as in neurology to relax a nerve, migraines etc. This is a proof that botulinum therapy is safe if performed by a specialist.

Another way of fighting aging is biological revitalization. This injection technique involves saturating the deep layers of the skin with low molecular weight hyaluronic acid, which actively restores the skin's water balance [4]. And although the procedure does not fight deep wrinkles and requires more time to perform, unlike botulinum therapy, after biological revitalization the skin will receive a powerful moisturizing, fresh and healthy look, and the aging process will slow down.

To conclude, it is necessary to emphasise that first of all, to have healthy, young and radiant skin, you need to follow the diet, including foods rich in vitamins and microelements, lead a healthy lifestyle, exercise, use daily home facial care according to your skin type, selected by a specialist, avoid stress and more often surround yourself with the positive.

List of references:

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