



ETIOLOGY OF HYPERPIGMENTATION, TREATMENT AND PREVENTION METHODS

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Annotation: Hyperpigmentation – diffuse or focal deposition of pigment in the skin, leading to a darkening of the color of the entire surface of the body or individual areas of the skin. Hyperpigmentation of the skin can be caused by various physiological and pathological causes, and therefore the following types are distinguished: freckles, melasma, chloasma, perioral pigmented dermatitis, secondary hyperpigmentation, etc. To determine the causes of hyperpigmentation, you need to consult a dermatologist, endocrinologist, or gastroenterologist. Treatment of hyperpigmentation may include treatment of major diseases and cosmetic procedures (chemical and laser peels, photo-rejuvenation, etc.). The term "hyperpigmentation" refers to an excessively intense coloration of certain areas of the skin in comparison with the color of the skin. This condition occurs due to an increased concentration of pigment substances contained in the cells of the epidermis.

Key words: hyperpigmentation , cell, blood vassels.

The color of a person's skin depends on a number of factors: the filling of blood vessels, the thickness of the epidermis, the skin pattern, etc. The most important factor affecting the color of the skin is the presence and concentration of special coloring substances-pigments, the determining one of which is the pigment melanin. Depending on the amount of melanin contained in the skin, its color can range from flesh-colored to dark brown. Melanin is produced by special cells of the epidermis-melanocytes. Under the influence of a special tyrosinase enzyme, the amino acid tyrosine is oxidized and melanin is formed. Melanin accumulates in special cells of the epidermis-melanophores and, due to its ability to absorb heat rays, protects the body from the effects of ultraviolet and infrared rays.

Thus, melanin serves as the main means of protecting the skin from burns and overheating of the body. The process of melanin synthesis is regulated by a neuro-humoral mechanism that ensures the unity of all organs and systems. Violation of one function leads to a violation of the overall balance of the body.

The increased content of melanin in certain areas of the skin can be caused by various reasons: endocrine disorders, changes in the hormonal background of a woman during pregnancy or menopause, certain diseases of the gastrointestinal tract, metabolic disorders caused by insufficient or excess vitamins and minerals. Often, the causes of hyperpigmentation are severe intoxication of the body, injuries and inflammatory processes of the skin, excessive exposure to the sun. Some medications can provoke the appearance of hyperpigmentation foci: tetracycline antibiotics, salicylic acid preparations, St. John's wort extract, etc. Hereditary factors and neuropsychiatric disorders play a significant role in the appearance of hyperpigmentation foci.

Favorite places of localization of pigmented spots are the face, arms and chest. Hyperpigmentation of the skin can be congenital (freckles) and acquired (chloasma, melasma). Freckles are multiple small, rounded pigmented spots of pale or dark brown color. Under the influence of sunlight, freckles acquire a more

pronounced color.

Chloasma – dark brown pigmented spots of irregular rounded shape, localized more often in the face area. They often occur against the background of hormonal changes in the body during pregnancy, as well as with a number of pathologies of the liver (hepatic chloasma), adrenal glands, helminthic infestations. They may disappear with the elimination of the cause of occurrence or persist for a long time.

Melasma – brown, often symmetrically located pigmented spots with a predominant localization on the face, neck, shoulders, appearing as a result of the combined action of sun rays and hormones. Most often, melasma occurs in pregnant women and women taking hormonal contraceptives.

Secondary hyperpigmentation of the skin occurs due to the outcome of traumatic or inflammatory skin diseases-infiltrates, neurodermatitis, eczema, etc.

Hyperpigmentation of the skin is a cosmetic defect that does not pose a serious danger to life and health. However, it presents a serious aesthetic problem and, as a result, psychological discomfort associated with dissatisfaction with one's appearance. The need to treat hyperpigmentation is also associated with the fact that it is located on the face, neck, arms, chest, i.e. open areas of the body, it is repeatedly exposed to sunlight, which causes an increase in the size of the elements and the intensity of their color.

In the treatment of hyperpigmentation, an integrated approach and the supervision of a dermatocosmetologist is important. You should not resort to self-medication: the use of scrubs and cosmetics with a bleaching effect will not bring the desired result and can only worsen the situation.

Treatment of age spots begins with the establishment of the causes of melanosis. To do this, you need to be examined by specialists: a gastroenterologist, gynecologist, internist, oncologist. In some cases, hyperpigmentation of the skin disappears after adequate treatment of the underlying disease that caused the appearance of age spots. If this does not happen, then a course of treatment with vitamins is carried out: ascorbic, folic, nicotinic acid, etc. Topical depigmenting agents are widely used: hydrogen peroxide, citric acid, lotions and ointments based on salicylic acid, quinine, mercury, tannin, salol, and perhydroxy.

An excellent result in the fight against age spots is given by cosmetic procedures. With the help of surface and middle chemical peeling of the skin, the upper layer of the epidermis is exfoliated. The effect of peeling on the skin is quite rough, so after such procedures, the skin needs special restorative care. A similar effect is provided by the procedure of dermabrasion-laser skin resurfacing. The effect of this hardware method is based on the destruction of cells with an excessive content of melanin due to their rapid heating. This method gives successful results in the treatment of freckles and chloasma.

The method of phototherapy or photo-rejuvenation not only fights pigmentation of the skin, but also improves the overall condition of the skin, stimulating the production of collagen and elastin. Photo-rejuvenation helps to get rid of fine lines, the skin becomes more elastic and taut. Ozone therapy helps to get rid of secondary hyperpigmentation that has a post-traumatic or inflammatory origin. It has a stimulating effect on the immune system, a local resorption and anti-inflammatory effect.

A comprehensive approach to the treatment of hyperpigmentation is the use of cosmetic preparations that reduce the synthesis of the pigment melanin in cells and maximize the protection of the skin from the sun factor with special creams and lotions. After completing the course of treatment, it is necessary to constantly follow the rules of skin care: avoid sunburn in the solarium and in direct sunlight, protect exposed areas of the body with powder or products with a sun protection factor.

Prognosis of hyperpigmentation treatment

The problem of hyperpigmentation can be solved only with the help of a competent and professionally selected course of individual treatment. Modern dermatocosmetology has in its arsenal reliable and proven methods of treating melanosis, with a persistent clinical effect. Do not try to cope with hyperpigmentation alone, contact specialists, and you will be rewarded with clean, beautiful, well-groomed skin.

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