E- Global Congress
Hosted online from Dubai, U. A. E., E - Conference.
Date: 29th October 2024
Website: https://eglobalcongress.com/index.php/egc
ISSN (E): 2836-3612

THE MODERN METHODS OF TREATMENT OF ALOPECIA

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Abstract
Pathological process in which there are persistent or temporary, total or partial loss of hair or lack of them. This problem occurs in children and adults, men and women almost equally. Despite the high quantity of researches and existing therapeutic methods of various forms of alopecia, the treatment is still not adequate. To solve this problem, in recent years, attend to meticulously study of structural and morphological characteristics of the skin and scar tissue in the focus, to research of hormonal imbalance and adopt a method of follicular microautotransplantation.

Keywords: alopecia, treatment, microautotransplantation.

The problem of premature hair loss is of great scientific and practical interest. This is due to the prevalence and steady growth of morbidity from various forms of apopecia, as well as great difficulties in developing effective methods of therapy [5]. In the republic, in connection with the improvement of the quality of life of the population, there is a high need for solving cosmetology problems, in particular hair loss.

Alopecia is a pathological process in which there is a permanent or temporary, complete or partial loss of hair or its absence [13], this pathology affects both children and adults, women and men almost equally [7]. There are many types of alopecia, but cicatricial and androgenetic alopecia are significant difficulties in conservative treatment, bringing psychological discomfort to patients and a decrease in the quality of life in the social environment [2].

Androgenetic alopecia - AGA.

This is the most common type of baldness in both men and women: it is believed that this type of baldness accounts for about 95% of all types of baldness [4].

Pathogenetic features of AGA in men and women are explained by the same location of hair follicles in the scalp, with increased sensitivity to androgens [14]. Such hair follicles are distributed in the frontal, parietal and crown areas.

The mechanism of development is as follows: under the action of the enzyme 5-alpha reductase, found in the cells of the hair follicle and hair papilla, testosterone is transformed into 5alpha-dihydrotestosterone [12]. The latter, penetrating the cell, disrupts protein synthesis. As a result, the size of the follicles decreases with a gradual transformation of terminal hair into vellus hair [11]. Hair follicles in the occipital area are intact to the action of androgens, therefore, when hair is transplanted using the autotransplantation method, the occipital area is considered the "donor" area.

Clinical features of AGA in men and women. In men, it usually develops closer to 20 years of age, in women - at 20-30 years of age [6]. **Hamilton** [10] first described the clinical features of diffuse hair thinning in **men** and classified V stages of baldness according to the degree of its severity (Fig. 1):

Stage I - hair loss along the frontal border of hairiness;

Stage II - formation of bilateral bald spots on the forehead and thinning of hair on the crown or top of the head;

Stage III - progressive hair loss on the forehead and crown;

Stage IV - fusion of bald spots on the forehead and crown;

Stage V - complete symmetrical baldness of the frontal-parietal region, in which only a narrow border of hair on the temples and back of the head remains on the scalp, which never falls out with AGA.

In women, according to **Ludvigu,** diffuse hair thinning begins with thinning of hair growth at the border with the forehead, later hair thinning in the crown and crown area joins in, but the border of hair growth on the forehead is preserved, despite the thinning (Fig. 2). In bald areas, the skin is smooth, shiny, the mouths of the hair follicles are not determined [9].

Diffuse alopecia is usually an early stage of androgenetic alopecia, or age-related alopecia. Most often, it is the telogen effluvium form of hair loss, although anagen effluvium is also occasionally encountered [8].

Рубцовая алопеция (псевдопелада Брока**)**

ISSN (E): 2836-3612

Irreversible hair loss caused by the death of hair follicles as a result of injuries, burns, surgical interventions, skin diseases such as scleroderma, leprosy, discoid lupus erythematosus, etc. The process is accompanied by the replacement of hair follicles with connective tissue, which leads to the formation of bald patches.

Treatment

Conservative hair restoration.

The effectiveness of therapeutic treatment is significantly higher in the early stages of baldness. The medications approved for the treatment of baldness in women include minoxidil (in the form of a solution for external use), and in men - minoxidil and finasteride (in the form of tablets for oral administration). Both drugs stimulate hair regrowth on the head, but these drugs are best used as preventive therapy, since neither of them changes the genetically determined sensitivity of hair follicles to androgens [1].

Surgical hair restoration.

The radical method of treating AGA and cicatricial alopecia worldwide is transplantation of one's own hair follicles, which gives a permanent result [15]. There are only two methods of modern follicular microtransplantation: patch **(Strip) and** seamless **(FUE).**

FoIlicular Unit Extraction is a method of seamless hair transplantation.

The peculiarity of this method is that the extraction of hair follicles (micrografts) is carried out without cutting the skin using a special miniature instrument, under the control of optical devices. This method is carried out in three stages:

1. Collection of donor material.
2. Formation of micro-holes in the recipient area.
3. Implantation of micrografts in the baldness area.

STRIP - a strip method of hair transplantation.

This method allows transplantation of a large number - more than 5,000 grafts - 11,500 follicles in one procedure. This method consists of 4 main stages:

1. Taking a hairy skin flap from the donor area.
2. Preparation of grafts from the flap.
3. Formation of micro-holes in the skin of the recipient area.

4. Implantation of grafts into the micro-holes.

Conclusion

To date, our region does not practice such effective methods of therapeutic treatment of androgenetic and cicatricial alopecia that would lead to restoration of hair growth. Therefore, it is advisable to introduce into medical practice the most proven method of treatment throughout the world - hair transplantation, in combination with therapy that strengthens the remaining follicles.

As a result of many years of research and scientific and practical developments, a unique technology for hair transplantation in cicatricial and androgen-dependent zones has been created. For the first time, based on electron microscopic studies, it was proven that hair follicles after transplantation take root well by 99.8% and are in the growth phase [15].

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