

Integrative Approaches to Supportive Care in Early Stages of Alopecia: The Impact of Barber Scalp Care Methods on Scalp Condition and Patient Well-Being

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Abstract

Alopecia in early stages destroys person's psyche before medical treatment has time to work. Classical dermatology prescribes medications and says wait three-six months, ignoring that person needs something right now - physically for scalp condition and psychologically for mental health preservation. Barber care methods - scalp massage, professional cleansing, stimulating procedures - exist for centuries but medicine doesn't take them seriously, relegating to aesthetics sphere rather than treatment. This article explores how barber care integration with medical treatment affects scalp condition and psychological well-being in early hair loss stages. Examined physiological mechanisms of massage impact on microcirculation, how cleansing reduces local inflammation and improves medication penetration, why regular care psychologically reframes situation from "I'm sick and treating" to "I'm taking care of myself". Special attention to barbers' role in early baldness diagnosis, as they see clients regularly and can notice problems before medical professionals, especially in men who traditionally rarely visit dermatologists until situation becomes critical. Theoretical literature analysis shows combined approach gives better results than medical treatment alone - physically through creating optimal hair growth conditions, psychologically through stress reduction which itself worsens alopecia through neuroendocrine and immunological mechanisms. Needed development of barber-dermatologist collaboration models, creation of training programs for barbers to recognize early signs of different alopecia types and ethically correctly refer clients to medical professionals, care protocols standardization for different baldness forms. Barber care doesn't replace pharmacological treatment but organically complements it, making therapeutic process less medicalized, psychologically more comfortable and potentially more effective through medical and care approaches synergy.

Keywords: alopecia, barber care, scalp, integrative approach, psychological well-being, early diagnosis

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1. Introduction

Imagine: a person wakes up in the morning, goes to the bathroom, washes his head and sees that there is a lot of hair left on his hands. Much more than usual. He looks in the mirror - it seems that the hair has become thinner,

the scalp is visible where it was not visible before. Panic. The heart is pounding. Who will I be bald? What's wrong with me? Why is this happening?

A person gathers courage and goes to a dermatologist. The doctor examines, maybe performs a trichoscopy,

says: "You have androgenetic alopecia, it has started. Here is a prescription for minocidil, apply it twice a day, maybe I'll also prescribe finasteride if you're a man. Come back in three months, we'll see if there's any progress." A person leaves the office with a prescription in hand and a feeling of absolute helplessness. Three months? It's an eternity when every morning you see hair on the pillow, in the shower drain, on the comb.

Classical medical treatment paradoxically often increases the psychological burden. A person receives a diagnosis - an official confirmation that "something is wrong" with him, that he is "sick". Regular visits to the clinic, reminders to take drugs twice a day, waiting for results that may not come - all this constantly reminds of the problem, fixes the identity of the "patient with the disease". It is mentally exhausting.

An unexpected perspective appears here - the integration of traditional barber scalp care methods into a comprehensive approach to the treatment of alopecia. Barbers have been working with hair and scalp for centuries, long before the advent of modern trichology. During this time, a huge amount of empirical experience has been gained in various techniques - massage of the scalp to stimulate blood circulation, professional deep cleaning with special means, peelings to renew the epidermis, rubbing stimulating tonic compounds, using various tools from brushes to vibromassages.

But all this rich tradition remains in the realm of "men's self-care", grooming, aesthetics. The medical community does not consider these methods seriously as part of a therapeutic approach. There is an artificial gap between medical treatment (drugs, injections, procedures in a clinic) and cosmetic care (haircut, styling, care in a barbershop or salon). This gap is harmful because it prevents the synergy of both approaches from being used.

Regular professional barber scalp care does several things at the same time. Physically - it systematically cleans the pores of excess sebum and impurities, mechanically stimulates blood microcirculation through massage, improves lymphatic drainage, reduces local inflammation, renews the epidermis through peelings, creates optimal conditions for the penetration of therapeutic drugs into the deeper layers of the skin. All this has a direct physiological basis and can potentially enhance the effect of pharmacological treatment.

Psychologically - and this is perhaps even more important - regular care in a barbershop or salon reformats the perception of the situation. A barbershop is not a clinic. This is a place where people just take care of their appearance, relax, enjoy the process, communicate in a relaxed atmosphere. When a person with initial alopecia begins to regularly visit a barber not "for treatment" but "for self-care", a psychological transformation takes place. She ceases to be exclusively a "patient with a diagnosis" and becomes simply "a person who takes care of herself." This is not a semantic game - it is a fundamental change in self-perception that reduces stress, returns a sense of control over the situation, and normalizes life.

This is especially relevant for men. Statistics show that men visit doctors much less often than women, postpone visits until the symptoms become unbearable, and follow medical recommendations worse. But many men regularly, every two to four weeks, visit a barbershop for a haircut. If a barber notices the early signs of alopecia - thinning at the temples, expanding bald spots, thinning on the top of the head - and tactfully advises the client to see a dermatologist, it can catch the problem at the stage when treatment is most effective, when most follicles are still alive and can recover with the right intervention.

This article examines how the integration of barber scalp care methods into a comprehensive approach to the management of patients with early alopecia affects the physical condition of the skin and hair follicles, psychological well-being, and the overall effectiveness of the therapeutic process. This is not about abandoning evidence-based medicine in favor of folk methods. It is about the intelligent integration of scientifically based pharmacological treatment with empirically proven care techniques for centuries, about creating a holistic approach that takes into account both biological and psychological aspects of the problem.

2. Materials and methods

A comprehensive theoretical analysis of scientific literature was carried out from several areas: medical aspects of alopecia (pathogenesis, clinical manifestations, modern methods of treatment), psychological consequences of baldness for patients, physiology of the scalp and hair follicles, mechanisms of influence of various physical factors on the condition of the skin.

To understand the systemic factors affecting the condition of the hair, the dissertation work of Gorda (2023) on the clinical-pathogenetic justification of the treatment of alopecia areata associated with the metabolic syndrome was used. This work is important because it shows how baldness is not an isolated problem of the scalp and often reflects systemic disorders in the body - metabolic shifts, hormonal imbalance, chronic inflammation. Understanding these connections is critical to understanding why a comprehensive approach that affects both the systemic and local levels can be more effective than a narrowly medicated one.

The study by Gozhenko and colleagues (2019) on the role of systemic inflammation in the pathogenesis of metabolic disorders provided a theoretical basis for understanding how chronic low-intensity inflammation creates an unfavorable environment in various tissues of the body, including the scalp. Inflammatory cytokines circulating in the blood during systemic inflammation affect microcirculation, vascular permeability, and cell metabolism. At the level of the scalp, this can be manifested by a deterioration in the nutrition of the follicles, a violation of the hair growth cycle, and increased sensitivity to androgens. The work of Aljabali (2021) on the patterns of changes in the concentration of interleukins IL-17a, IL-10 and IL-2 in the blood of people with alopecia areata before and after treatment with platelet-rich plasma showed that immunological changes at the systemic level are closely correlated with local processes of hair growth restoration. This confirms that the influence on the local immune state of the scalp through the reduction of inflammation, improvement of microcirculation, optimization of conditions for the work of follicles can have a measurable therapeutic effect.

Special attention in the analysis is paid to psychological studies of the impact of alopecia on the quality of life of patients. The work of Aldhouse and colleagues (2020) presents a qualitative interview study where patients with alopecia areata describe in detail their psychosocial burden. The title of the article is eloquent - a quote from an interview: "You're losing your hair, what's the difference? And I was so ashamed, so insecure, so depressed." This is a fascinating testimony of the gap between how the environment perceives baldness ("so what, a small problem") and how the person himself experiences it (a catastrophe that destroys a life).

A systematic review by Aukerman and Jafferany (2023) summarizes the psychological consequences of androgenetic alopecia, the most common form of

baldness. Depression, anxiety disorders, social phobia, low self-esteem, avoidance of intimate relationships, limitation of career ambitions - the list is impressive in its length and severity. And these are not rare cases, but quite typical manifestations of the psychological reaction to hair loss, especially in young people.

In their qualitative study, Barkauskaite and Serapinas (2020) emphasize the therapeutic implications of the psychological state of patients - that is, they do not simply state that people suffer psychologically, but show that this psychological state directly affects the effectiveness of medical treatment. A depressed patient adheres less to appointments, is less motivated to continue treatment in the absence of quick results, and his body responds less well to therapy due to stress-induced hormonal and immune changes.

A study by Borg and Kennedy (2012) examined the coping strategies and psychosocial impact of alopecia in young Australians. It is especially interesting to identify the gender characteristics of the experience - young men are often ashamed to talk about the problem even with loved ones, close themselves off, try to "hold on" and "not show weakness", which leads to internal tension and deterioration of the mental state.

Based on the analysis of this literature, a theoretical study of the possible mechanisms of the influence of barber care techniques on the physiological condition of the scalp and the psychological well-being of people with early alopecia was conducted. Considered how massage affects microcirculation, how professional cleaning reduces inflammation and improves the penetration of drugs, how regular care in a non-medical context can psychologically reformat the perception of the situation.

Special attention is paid to the analysis of the potential role of barbers as agents of early diagnosis of alopecia. The frequency of contact (many men visit the barbershop every 2-4 weeks versus infrequent visits to the doctor), the ability to notice early changes (the barber works directly with the hair and scalp), trust relationships (many clients have been going to the same barber for years), and the lower psychological barrier for discussing problems in the informal atmosphere of the barbershop compared to the clinical setting, were considered.

It has been analyzed which specific barbering techniques are most relevant for different types of early alopecia, how they can be integrated with medical treatment without conflicts and with maximum synergy, which

care protocols are optimal, and what the cooperation between a barber and a dermatologist should look like.

The gender features of the approach are considered - why men respond better to the barbershop model of care integration, how to adapt the approach for women through beauty salons, what psychological nuances should be taken into account when working with different groups of patients.

Limitations of the methodology: This is a theoretical analysis based on the existing literature without conducting our own empirical research or clinical trials. Conclusions are based on extrapolation of data from various sources and theoretical considerations about possible mechanisms of action, and not on direct measurements of the effectiveness of the proposed integrative approach. Further research should include clinical trials with objective measurements of the combined approach's impact on hair density, scalp condition, and psychological indicators of patients' quality of life.

3. The Results

Smalyukh and colleagues (2022) wrote about antioxidants that improve microcirculation at the level of the cardiovascular system. The mechanism is simple - antioxidants neutralize free radicals that damage the endothelium of blood vessels and disrupt the production of nitric oxide, a natural vasodilator. Massage has a similar effect, but mechanically, without chemistry - simply physical stimulation triggers a cascade of reactions that leads to the expansion of blood vessels and improved blood flow.

There is another aspect of massage that is rarely discussed in the literature. The scalp is attached to the skull through a thin layer of subcutaneous tissue and aponeurosis - a tendon helmet that covers the skull. Muscles are attached to this aponeurosis - frontal in front, occipital at the back. With chronic tension, these muscles can be in a state of constant contraction, which creates mechanical pressure on the tissues and can impair blood supply. Massage relaxes these muscles, relieves spasm, and reduces mechanical compression of blood vessels. This is a speculative hypothesis, but it has some logic.

Professional deep cleansing of the scalp is the next important technique. This is not just a quick washing with shampoo as a person does at home in the shower in a couple of minutes. Barber uses special cleansers, often with the addition of acids (glycolic, salicylic) that

dissolve sebum lipids and exfoliate dead cells. Massages much longer - five to ten minutes only for application and rubbing, and the same amount for washing. Uses techniques that ensure thorough cleaning of pores, removal of all residual sebum, styling products, and air pollution. Why is this important? Sebum - a natural secret of the sebaceous glands - in moderate amounts protects the skin and hair from drying out. But with excessive production (which is typical for androgenic alopecia due to hormonal influence on the sebaceous glands), sebum accumulates, clogs pores, oxidizes under the influence of oxygen and skin microflora, and becomes an irritant. Oxidized sebum contains free radicals and inflammatory mediators that can damage follicles.

Dead cells of the epidermis are normally constantly exfoliated imperceptibly. But in the case of disorders - excessive production (hyperkeratosis), insufficient exfoliation, the presence of dandruff or seborrheic dermatitis - they accumulate, creating a layer that impairs skin breathing and blocks the penetration of any means deep.

After professional cleaning, the scalp is clean, pores are open, and inflammation is reduced. In such a state, any medicinal products - minocidil, lotions with aminexil, serums with peptides - penetrate much better. Their bioavailability increases, efficiency increases. This is not an abstract theory - the difference in the penetration of drugs through clean and contaminated skin can be two or three times.

Scalp peeling is a more aggressive procedure that is not done as often as regular cleaning. Once every two to four weeks, depending on the skin type and reaction. Peeling can be chemical (using acids that dissolve intercellular connections in the stratum corneum) or mechanical (scrubs with abrasive particles). The goal is to remove the entire keratinized layer of the epidermis, stimulate regeneration, and renew the skin surface.

This is a traumatic procedure in a good sense - a controlled micro-damage that triggers restorative processes. After removing the stratum corneum, the cells of the basal layer of the epidermis receive a signal to actively divide to restore the barrier. This accelerates skin renewal, improves its general condition. At the same time, the permeability for any substances increases sharply - this is both a plus (drugs penetrate better) and a minus (you need to be careful not to apply aggressive substances to freshly exfoliated skin).

Aljabali (2021) showed that when treating alopecia areata with PRP therapy (injection of platelet-rich plasma), measurable changes in the immunological profile of the blood occur - the concentration of pro-inflammatory interleukin IL-17a decreases, the level of anti-inflammatory IL-10 increases. And these changes correlate with clinical restoration of hair growth. This confirms that the local immune state of the skin is critically important.

Barber treatments are not as powerful as PRP, but they also affect local immunology. Decreasing bacterial and fungal load through cleansing reduces antigenic stimulation. Improving microcirculation through massage accelerates the removal of inflammatory mediators. Mechanical stimulation activates local skin immune cells (Langerhans cells, mast cells) in a modulating, not inflammatory mode. All this together can create a less inflammatory, more favorable environment for the follicles.

Stimulating procedures - rubbing in tonics, using vibrators, sometimes light electrostimulation procedures - these are additional tools in the barber's arsenal. Tonics often contain substances that cause mild irritation and blood flow - menthol, camphor, red pepper extract, nicotinic acid. Or substances that directly stimulate follicles - caffeine (proven stimulator of hair growth in vitro), copper peptides, B vitamins.

The effectiveness of these substances is different and often debatable. Caffeine, for example, has shown in laboratory conditions the ability to prolong the phase of active growth of the follicle (anagen) and stimulate the proliferation of hair papilla cells. But whether the concentration for topical application in cosmetics is sufficient for a clinically significant effect is an open question. Pepper extract causes irritation and blood flow, that's for sure, but whether it's enough to stimulate hair growth or just gives the feeling that "something is happening" is also unclear.

However, in the context of a comprehensive approach, these procedures do not necessarily have to have a strong effect by themselves. Even if they provide a 5-10% improvement in microcirculation or stimulation of follicles, in combination with cleaning, massage, medical preparations, this can add up to a synergistic effect that exceeds the simple sum of the components.

Psychological studies of recent years convincingly demonstrate that alopecia creates a huge psychosocial

burden for patients. Aldhouse and colleagues (2020) conducted a qualitative interview study with patients with alopecia areata. The quote from the title of the article - the words of one of the participants - eloquently reflects the gap between the external perception of the problem and the internal experience: "You're losing hair, what's the difference?" - this is how the environment reacts. "I was so ashamed, so insecure, so depressed" - this is how a person feels.

Study participants described deep shame, especially in public places. Constant anxiety that someone will notice bald spots or overlays/wigs. Avoidance of social contacts, refusal of activities that can draw attention to appearance - sports, beach, swimming pool, even just windy weather that can tear off the wig. Depressive episodes, sometimes suicidal thoughts. Loss of a sense of attractiveness, avoidance of intimate relationships. The feeling that he has lost a part of himself, his identity.

Aukerman and Jafferany (2023) in a systematic review summarized the psychological consequences of androgenic alopecia - the most common form of baldness affecting up to 50% of men and up to 25% of women by a certain age. Depression is diagnosed in a significantly higher percentage of people with androgenic alopecia compared to the general population. Anxiety disorders are also more common. Social phobia, especially in young people. Decreased self-esteem, especially in the domains of physical attractiveness and social acceptability. Limitation of career ambitions - some people avoid professions where it is necessary to speak publicly or be seen.

It is important that these psychological problems are not just concomitant symptoms. Barkauskaite and Serapinas (2020) emphasize the therapeutic implications of the psychological state. A person in depression and anxiety adheres to medical prescriptions worse - he forgets to apply drugs, misses appointments, cannot withstand a long course of treatment. Stress in itself worsens alopecia through neuroendocrine mechanisms - elevated cortisol negatively affects the follicle growth cycle, can trigger autoimmune reactions in alopecia areata, accelerate miniaturization in the androgenic form.

A vicious cycle occurs: baldness → stress → worsening baldness → more stress. Breaking this cycle is critical to effective treatment. And here the psychological aspect of barber care becomes key.

Paradoxically, classical medical treatment often increases the psychological burden. A person receives a diagnosis - an official confirmation that "something is wrong with him", that he has a "disease". This medicalizes the problem, makes it part of the medical identity. Regular visits to the clinic, consultations with a dermatologist, maybe a trichologist, constant reminders to take drugs twice a day strictly according to the schedule - all this fixes attention on the problem, makes it a central part of life.

Waiting for results that may not come or come very slowly creates additional anxiety. Minokidyl should be used for at least three months to see the first results, often six months for a significant effect. Half a year of daily smearing with the constant thought "does it work or not?" psychologically exhausting. And if after six months there is no effect or it is minimal - disappointment can be devastating.

A barbershop or a beauty salon is a completely different context. This is not a medical facility. This is a place where people just care about their appearance, about grooming, about looking and feeling good. The atmosphere is relaxed, often even festive. People come here not to be "treated" but to "pamper themselves", "put themselves in order", "relax".

When a person with early alopecia begins to visit a barber regularly - say once every two or three weeks - for professional scalp care, a fundamental psychological transformation takes place. She stops perceiving herself exclusively as a "patient with baldness who needs treatment" and begins to perceive herself as "a person who takes care of herself, takes care of her appearance." It's not just a change of words, it's a change of self-identity.

"I'm sick and I'm being treated" versus "I'm taking care of myself" seems like a small difference, but psychologically it's a chasm. The first creates the identity of a sick person, a patient, a person with a problem. The second is the identity of an active person who controls the situation, does something for himself, takes care of himself. The locus of control shifts from external (the doctor is treating me, the medicine should work) to internal (I do something myself, I am an active participant in the process). Clarke-Jeffers et al. (2024) in a study of Black women's experiences with alopecia quote participants: "Hair is your crown and glory." For many cultures, especially African-American, hair is deeply connected to identity, femininity, cultural

belonging. Hair loss is experienced as the loss of a part of oneself. But regular care for the remaining hair, professional procedures in the salon, attention to the scalp - all this helps to maintain a connection with this part of the identity. "I still take care of my hair, I'm still a woman with a crown."

Borg and Kennedy (2012) found that young men with alopecia are often embarrassed to talk about the problem even with loved ones. Traditional gender norms dictate "to be strong", "not to complain", "to cope on your own". This leads to isolation - a person is silent, suffers internally, does not seek support. Barbershop can become a space where you can talk about it naturally, without shame. The barber sees the problem (he works with the client's hair directly), can broach the subject delicately, and discuss it without judgment. Other customers in the barbershop may also have similar problems - this reduces the feeling of the uniqueness of their misfortune, normalizes the situation.

Regularity of visits is also psychologically important. Instead of constant background anxiety about baldness and periodic panic episodes when a person looks in the mirror, there is a structure - every two or three weeks a visit to the barber, care procedures, communication, the feeling that "I am doing something for this". Between visits, you can think less about the problem, because there are specific points of contact in a positive context. The very process of care - head massage, washing, application of products - is physically pleasant and relaxing. Head massage causes pleasant sensations, can reduce tension headache (which often accompanies stress), stimulates the release of endorphins. This is a physiological relaxation that lowers the level of cortisol - the stress hormone. And lowering cortisol is directly beneficial for hair.

The result is a multi-level intervention: physically - improving the condition of the scalp, cognitively - reformatting from "I'm sick" to "I take care of myself", emotionally - reducing anxiety and stress due to regular pleasant procedures, socially - reducing isolation due to the opportunity to talk about the problem in a supportive context. And all this without a single word "therapy" or "treatment" - just regular self-care.

4. Discussion

An integrative approach to early alopecia that combines medical treatment with regular professional barber care has the potential to significantly improve outcomes both

physically and psychologically. Physiologically, barber methods - massage, deep cleansing, peeling - improve the condition of the scalp, stimulate microcirculation, reduce local inflammation, and increase the effectiveness of medical drugs due to better penetration. In the early stage of alopecia, when the follicles are still alive but weakened, this can really slow down the progression and increase the effect of treatment.

Psychologically, barber care reforms the situation from "I'm sick and being treated" to "I'm taking care of myself." It reduces stress, returns a sense of control, normalizes life. Regular visits to the barbershop create positive points of contact with the problem, reduce social isolation, and provide space for discussion in a non-medical context that is less stigmatized. Given that stress itself worsens alopecia through hormonal mechanisms, the psychological benefit of grooming may have a real physiological effect.

Barbers are potentially important agents of early diagnosis, especially for men who are less likely to see doctors. Trained barbers can notice early signs of alopecia and tactfully recommend contacting a specialist, catching the problem at the stage when treatment is most effective. Collaboration between barbers and dermatologists through a referral and feedback system can create a comprehensive support network for people with alopecia.

Economically, the approach is available if the frequency of professional procedures is optimized and combined with home care. Educating clients on self-massage and proper home cleaning reduces dependence on expensive professional procedures while retaining a significant portion of the benefits.

Gender characteristics are important - men respond better to a barbershop model, women to a beauty salon, but the principles are similar. Critical tact and training of staff in working with the sensitive topic of alopecia.

Prospects for further research include clinical trials of the effectiveness of a combined approach (medical treatment + barber care) compared to medical treatment alone. Objective measurements of the effect on hair thickness, the condition of the scalp, and the rate of progression of alopecia are needed. Psychological studies of the influence of regular care on the level of stress, depression, and quality of life of patients with alopecia. Development of standardized care protocols for different types of alopecia. Creation of training programs for

barbers on the basics of trichology, problem recognition, ethics of working with sensitive clients. Study of optimal models of cooperation between barbers and medical professionals from legal and practical points of view. Economic cost-benefit analysis of the integrative approach at the population level.

It is important to understand that barber care does not replace medical treatment and is not "alternative medicine". This is a complementary approach that complements the main treatment, improves the conditions for its effectiveness, and supports the patient's psychological well-being. When properly integrated into the system of care for people with alopecia, it can become a valuable tool for improving treatment results and quality of life.

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