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ALOPECIA: CLINICAL CLASSIFICATION, ETIOLOGICAL FACTORS, AND CURRENT THERAPEUTIC APPROACHES

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✓ ***Resume***

This paper examines the clinical manifestations, etiologies, and therapeutic responses of alopecia patients utilizing empirical data from the Surkhandarya Regional Dermatovenerologic Dispensary in Uzbekistan. Alopecia, or hair loss, is a disorder that frequently bears significant emotional and psychological implications for individuals affected. While first appearing trivial, hair loss might indicate more severe internal health issues and profoundly impact an individual's quality of life. From 2022 to 2024, seventy-one patients with various forms of alopecia sought medical assistance at the dispensary. The most often observed types encompassed androgenetic alopecia, alopecia areata, telogen effluvium, and scarring alopecias. Every patient had a comprehensive assessment comprising clinical examination, trichoscopy, and laboratory analyses to ascertain the precise etiology of hair loss. According to the findings, patients were provided with personalized treatments, including topical minoxidil, systemic corticosteroids, platelet-rich plasma therapy, or supportive care emphasizing diet and stress alleviation.

The results differed based on the type and stage of alopecia. Patients who had early intervention and consistent monitoring exhibited superior outcomes, particularly in instances of non-scarring and transient hair loss. The research indicated that numerous individuals postpone seeking assistance, which may diminish therapy efficacy and exacerbate emotional suffering. This article seeks to enhance understanding of alopecia's extensive effects by sharing ideas from a regional medical facility and to promote earlier diagnosis and personalized treatment. The results may benefit local clinicians and healthcare providers in analogous environments aiming to enhance outcomes for patients experiencing hair loss.

Keywords: Alopecia, Alopecia Areata, Androgenetic Alopecia, Telogen Effluvium, Cicatricial Alopecia, Hair Loss Treatment, Trichoscopy, Platelet-Rich Plasma Therapy, Psychological Impact of Alopecia

ALOPETSIYA: KLINIK TASNIFI, ETIOLOGIK OMILLARI VA ZAMONAVIY DAVOLASH YONDASHUVLARI

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✓ ***Rezyume***

Ushbu maqolada O'zbekistondagi Surxondaryo viloyat teri-tanosil kasalliklari dispanserining empirik ma'lumotlariga asoslanib, alopetsiya bilan og'rigan bemorlarning klinik belgilari, kelib chiqish sabablari va davolash usullariga bo'lgan javoblari tahlil qilingan. Alopetsiya yoki soch to'kilishi ko'pincha bemorlar uchun jiddiy hissiy va ruhiy oqibatlarga olib keladigan kasallikdir. Dastlab ahamiyatsiz tuyulsa-da, soch to'kilishi ichki salomatlik bilan bog'liq jiddiy muammolarni ko'rsatishi va insonning hayot sifatiga sezilarli ta'sir ko'rsatishi mumkin. 2022-2024 yillar davomida dispanserga alopetsiyaning turli

shakllari bilan 71 nafar bemor murojaat qilgan. Eng ko‘p uchraydigan turlar androgenetik alopetsiya, o‘choqli alopetsiya, telogen effluvium va chandiqli alopetsiyalarni o‘z ichiga olgan. Har bir bemorda soch to‘kilishining aniq sababini aniqlash uchun klinik ko‘rik, trixoskopiya va laboratoriya tahlillaridan iborat keng qamrovli tekshiruv o‘tkazildi. Natijalarga ko‘ra, bemorlarga mahalliy minoksidil, tizimli kortikosteroidlar, trombotsitlarga boy plazma terapiyasi yoki parhez va stressni kamaytirish choralariga asoslangan qo‘llab-quvvatlovchi davolash kabi individual yondashuvlar tavsiya etildi.

Natijalar alopetsiyaning turi va bosqichiga qarab turlicha bo‘ldi. Erta muolaja va muntazam kuzatuv o‘tkazilgan bemorlarda, ayniqsa chandiqsiz va vaqtinchalik soch to‘kilishi holatlarida, yaxshi natijalar kuzatildi. Tadqiqot shuni ko‘rsatdiki, ko‘pchilik bemorlar yordam so‘rashni kechiktiradi, bu esa davolash samaradorligini pasaytirishi va ruhiy azoblanishni kuchaytirishi mumkin. Ushbu maqola mintaqaviy tibbiyot muassasasi tajribasini o‘rtoqlashish orqali alopetsiyaning keng qamrovli ta’sirini tushunishni yaxshilashga va erta tashxis qo‘yish hamda individual davolashni rag‘batlantirishga qaratilgan. Tadqiqot natijalari soch to‘kilishini boshdan kechirayotgan bemorlar uchun natijalarni yaxshilashga intilayotgan o‘xshash sharoitlardagi mahalliy shifokorlar va sog‘liqni saqlash xodimlariga foydali bo‘lishi mumkin.

Kalit so‘zlar: Alopetsiya, O‘choqli alopetsiya, Androgenetik alopetsiya, Telogen effluvium, Chandiqli alopetsiya, Soch to‘kilishini davolash, Trixoskopiya, Trombotsitlarga boy plazma terapiyasi, Alopetsiyaning ruhiy ta’siri

АЛОПЕЦИЯ: КЛИНИЧЕСКАЯ КЛАССИФИКАЦИЯ, ЭТИОЛОГИЧЕСКИЕ ФАКТОРЫ И СОВРЕМЕННЫЕ ТЕРАПЕВТИЧЕСКИЕ ПОДХОДЫ

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✓ ***Резюме***

В данной работе рассматриваются клинические проявления, этиология и терапевтические реакции пациентов с алопецией на основе эмпирических данных Сурхандарьинского областного дерматовенерологического диспансера в Узбекистане. Алопеция, или выпадение волос, - это расстройство, которое часто имеет значительные эмоциональные и психологические последствия для пострадавших. Хотя на первый взгляд выпадение волос может казаться незначительным, оно может указывать на более серьезные внутренние проблемы со здоровьем и существенно влиять на качество жизни человека. С 2022 по 2024 год 71 пациент с различными формами алопеции обратился за медицинской помощью в диспансер. Наиболее часто наблюдаемые типы включали андрогенетическую алопецию, очаговую алопецию, телогеновое выпадение волос и рубцовую алопецию. Каждому пациенту было проведено комплексное обследование, включающее клинический осмотр, трихоскопию и лабораторные анализы для определения точной этиологии выпадения волос. По результатам обследования пациентам назначалось персонализированное лечение, включая местное применение миноксидила, системные кортикостероиды, терапию обогащенной тромбоцитами плазмой или поддерживающий уход с акцентом на диету и снижение стресса.

Результаты различались в зависимости от типа и стадии алопеции. Пациенты, получившие раннее лечение и находившиеся под постоянным наблюдением, показали лучшие результаты, особенно в случаях нерубцовой и временной потери волос. Исследование показало, что многие люди откладывают обращение за помощью, что может снизить эффективность терапии и усугубить эмоциональные страдания. Эта статья направлена на расширение понимания многогранных последствий алопеции путем обмена опытом регионального медицинского учреждения и содействия ранней диагностике и персонализированному лечению. Результаты могут быть полезны местным клиницистам и медицинским работникам в аналогичных условиях для улучшения результатов лечения пациентов с выпадением волос.

Ключевые слова: Алопеция, Очаговая алопеция, Андрогенетическая алопеция, Телогеновое выпадение волос, Рубцовая алопеция, Лечение выпадения волос, Трихоскопия, Терапия обогащенной тромбоцитами плазмой, Психологическое влияние алопеции

Introduction

Alopecia, or hair loss, is a condition that transcends mere aesthetic considerations. For numerous individuals, hair loss is correlated with a decline in self-esteem, identity, and confidence. Alopecia, while not medically life-threatening, frequently has considerable psychological and social ramifications, especially when it impacts prominent regions like the scalp, eyebrows, or eyelashes. Hair possesses significant cultural, social, and emotional significance, and its abrupt or gradual loss can induce pain not just for the individual but also for their family and social surroundings. Alopecia is not a singular disease; rather, it is a comprehensive word that includes various diverse disorders, each characterized by unique origins, patterns, and treatment responses. The prevalent types encompass androgenetic alopecia, a hereditary and hormone-associated syndrome; alopecia areata, an autoimmune disorder; telogen effluvium, generally associated with stress or physiological trauma; and cicatricial alopecias, characterized by irreversible follicular damage. The significant differences among these kinds render accurate diagnosis essential for directing treatment. In Uzbekistan, particularly in areas such as Surkhandarya, access to expert dermatological services is constrained, leading many patients to postpone seeking assistance until hair loss becomes severe or persistent. Consequently, therapy outcomes frequently remain unsatisfactory. Public understanding regarding alopecia, its triggers, and early therapies remains nascent, with several individuals enduring their plight in secret due to stigma or misconceptions surrounding the ailment [1].

The Surkhandarya Regional Dermatovenerologic Dispensary in Termez is essential in tackling these issues. As a principal referral center for dermatological conditions, it caters to a varied population and provides significant insight into the actual burden of alopecia. This article reports outcomes from 71 people diagnosed and treated at the dispensary from 2022 to 2024. The objective is to categorize the various forms of alopecia, investigate potential underlying causes, and assess patient responses to diverse treatment modalities. This study aims to enhance the understanding of alopecia in southern Uzbekistan by concentrating on clinical data from a regional facility, so facilitating more prompt, personalized, and effective care in analogous healthcare environments.

Methods

This investigation was performed as a retrospective clinical analysis of individuals exhibiting hair loss at the Surkhandarya Regional Dermatovenerologic Dispensary in Termez, Uzbekistan. The investigation encompassed patient records from a two-year interval, spanning January 2022 to January 2024. The aim was to identify the prevalent forms of alopecia in this regional context, examine the potential contributing factors, and evaluate the efficacy of various treatment modalities in practical scenarios.

Seventy-one patients were enrolled in the trial. All participants were diagnosed with alopecia through clinical evaluation conducted by attending dermatologists at the time of presentation. Eligibility for inclusion required patients to possess comprehensive medical documentation, encompassing personal history, physical examination results, diagnostic test outcomes, and records of follow-up visits or treatment responses. Patients with congenital hair abnormalities or missing records were eliminated from the analysis to maintain data consistency and dependability [2].

The diagnostic procedure for each patient commenced with a comprehensive clinical interview and assessment. Medical personnel gathered data on the duration and pattern of hair loss, accompanying symptoms such as pruritus or inflammation, familial history of alopecia, recent physical or emotional stressors, dietary practices, and any prior therapies used. Special emphasis was placed on systemic illnesses, including thyroid dysfunction, iron deficiencies, and autoimmune disorders, that may be associated with hair loss.

After doing a history-taking and clinical examination, trichoscopy was executed in the majority of instances with a dermatoscope to meticulously examine scalp and hair shaft irregularities. This non-invasive method facilitated the differentiation of various types of alopecia by examining characteristics such as fractured hairs, yellow spots, follicular shrinkage, or indications of scarring. Laboratory studies were requested as necessary, contingent upon clinical suspicion. These assessments often comprised a full blood count, ferritin levels, thyroid function evaluations, and indicators of autoimmune activity. In a limited number of instances where the diagnosis was ambiguous or cicatricial alopecia was suspected, scalp samples were performed and submitted for histological verification.

Treatment decisions were individualized for each patient, including the proven diagnosis, extent of hair loss, and the patient's preferences and medical history. Individuals with androgenetic alopecia were frequently administered topical minoxidil and occasionally provided oral supplements containing biotin or iron. Individuals with alopecia areata received corticosteroid treatment, administered either as topical treatments or intralesional injections, contingent upon the size and extent of the lesions. A cohort of patients unresponsive to conventional treatment or experiencing recurrent alopecia areata episodes were provided with platelet-rich plasma therapy, administered across many sessions at intervals of two to three weeks. In every instance, patients were instructed on stress alleviation methods, appropriate hair care protocols, and nutritional assistance where necessary [3].

Subsequent assessments were performed at consistent intervals, generally every four to six weeks. Progress was assessed via clinical pictures, hair density evaluations, and patient feedback. All data utilized for research were anonymized, and ethical monitoring was ensured through internal review at the dispensary. This study exclusively utilized standard clinical data without incorporating experimental procedures, while ensuring patient confidentiality was maintained throughout. This methodology facilitated a thorough comprehension of alopecia within a regional clinical framework and offered insights for the adaptation and enhancement of dermatological services in analogous low-resource healthcare environments [4].

Results and Discussion

This study comprised 71 individuals diagnosed with various types of alopecia at the Surkhandarya Regional Dermatovenerologic Dispensary from 2022 to 2024. The study population consisted of men and women aged 16 to 65 years, encompassing a wide demographic spectrum. The majority of patients sought consultation owing to observable hair thinning, localized bald patches, or advancing hair loss that had not responded to self-treatment. Each case underwent clinical evaluation, with diagnoses substantiated through trichoscopy, laboratory investigation, and, when necessary, scalp biopsy. This facilitated a distinct categorization of alopecia kinds and the formulation of suitable treatment strategies. Of the 71 cases, alopecia areata was the predominant kind, identified in 28 individuals. Subsequently, androgenetic alopecia was observed in 24 patients, telogen effluvium in 13, and cicatricial alopecia in 6 instances. The data indicate a prevalence of non-scarring alopecias, particularly those of autoimmune and hormonal origin. The table below displays the clinical distribution breakdown.

Table 1. Clinical Distribution of Alopecia Types Among Patients (n = 71)

Alopecia Type	Number of Patients	Percentage (%)
Alopecia Areata	28	39.4
Androgenetic	24	33.8
Telogen Effluvium	13	18.3
Cicatricial	6	8.5

This distribution demonstrates that alopecia areata continues to be a significant dermatological issue in this area. Numerous patients with this illness had abrupt circular patches and disclosed recent psychological stress or immune-related symptoms. Androgenetic alopecia was predominantly observed in male individuals, exhibiting a typical pattern of fronto-temporal or vertex thinning. Telogen effluvium is frequently linked to recent physical ailments, childbirth, or nutritional deficiencies. Cicatricial alopecia was uncommon but distinguished by its more severe progression and delayed onset [5].

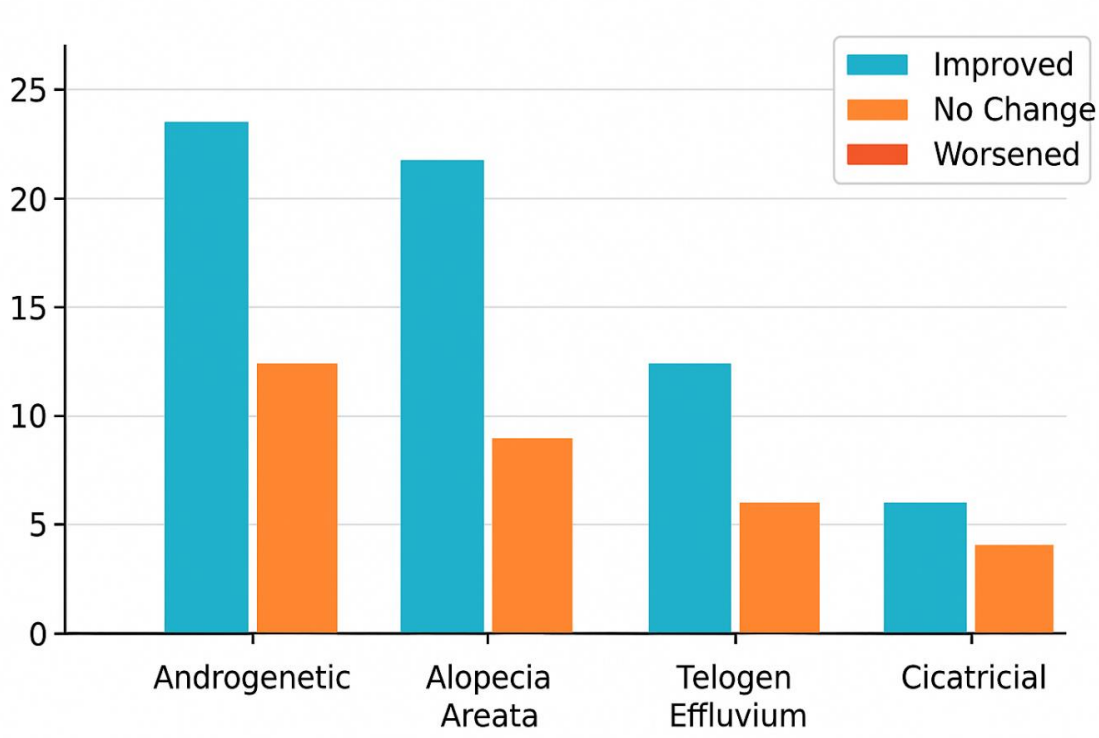
Treatment outcomes were documented during a follow-up period of three to six months. Patients were classified into three result categories: better, unchanged, or deteriorated. Improvement was characterized by noticeable hair regrowth or evident stabilization of hair loss. A static condition was defined as the absence of change, whereas deterioration indicated ongoing or intensified hair loss despite treatment. The subsequent table encapsulates these outcomes [6].

Table 2. Treatment Outcomes by Alopecia Type

Alopecia Type	Improved	No Change	Worsened
Androgenetic	18	6	0
Alopecia Areata	21	5	2
Telogen Effluvium	10	3	0
Cicatricial	2	3	1

The highest success rates were observed in telogen effluvium, with around 77 percent of patients indicating improvement following the rectification of underlying factors such as iron deficiency or post-infectious stress. Androgenetic alopecia shown a favorable response, especially in its initial phases, when patients complied with topical minoxidil treatment and supportive care. Alopecia areata exhibited diverse outcomes; the majority of cases responded with corticosteroids or PRP, however two individuals with severe lesions did not react. Cicatricial alopecia demonstrated the highest resistance, with only two patients exhibiting slight improvement, so affirming its more aggressive and irreversible characteristics. The bar diagram below illustrates these results, comparing treatment outcomes across all four kinds of alopecia [7].

Figure 1. Comparison of Treatment Outcomes Across Alopecia Types



The diagram indicates that non-scarring alopecias, including telogen effluvium and androgenetic alopecia, exhibited higher rates of improvement, but scarring kinds, particularly cicatricial alopecia, demonstrated a greater propensity for static or worse outcomes. Significantly, no patients in the androgenetic or telogen effluvium cohorts exhibited disease progression, underscoring the efficacy of early management in these disorders.

The data indicates that most patients saw advantages from personalized therapy, particularly when treatment commenced early and was accompanied by follow-up care. The results indicate that non-scarring alopecia generally responds more favorably to conventional treatment, but scarring alopecia necessitates more sophisticated intervention and frequently exhibits irreparable damage by the time medical assistance is pursued. These findings underscore the paramount significance of early diagnosis, patient education, and accessible dermatological treatments, particularly in remote areas like Surkhandarya.

Numerous patients pursue medical assistance for hair loss following weeks or even months of indecision. They arrive with more than merely a bodily ailment. Concealed beneath thinning hair or bald patches are frequently anxiety, diminished self-esteem, and unresolved inquiries. This study, encompassing 71 people treated at the Surkhandarya Regional Dermatovenerologic Dispensary, revealed that alopecia constitutes both an emotional burden and a dermatological diagnosis. Each consultation presented an opportunity not just to utilize medical expertise but also to listen, provide reassurance, and offer guidance.

Alopecia areata was the predominant condition among the patients we examined. It often impacted younger persons who were socially active, professionally involved, and acutely aware of their looks. Numerous individuals arrived apprehensive of a considerably graver outcome, unclear whether their hair would ever regrow. It was essential to elucidate the situation, to present images of regeneration, and to provide hope through substantiated proof. The majority of these individuals exhibited a favorable response to treatment. When PRP and corticosteroids were administered promptly and consistently, hair regrowth occurred in the majority of instances. Nevertheless, a few exhibited no substantial enhancement, especially those with more scalp involvement. These instances reminded us that although science informs our methodology, it cannot ensure uniform outcomes for all individuals. Individuals with androgenetic alopecia exhibited a more progressive and protracted pattern of hair loss. Numerous individuals, especially men, had endured the disease for years prior to ultimately pursuing treatment. They frequently entered silently, communicating in terse phrases, occasionally already persuaded that no assistance could be rendered. However, when receiving a consistent treatment regimen, particularly one that included minoxidil and supportive care, their engagement significantly increased. Enhancement was generally observable after two to three months, and their disposition frequently altered. One patient returned and stated succinctly, “It’s effective.” I feel improved. Those remarks conveyed more than any snapshot or chart could illustrate [8].

Telogen effluvium presented an entirely distinct narrative. The patients frequently comprised women who had experienced significant stress, illness, or hormonal fluctuations. Their hair loss occurred abruptly, leaving them astonished. Numerous individuals observed substantial tufts of hair shedding in the shower and feared they were gravely unwell. For them, reassurance was equally as vital as treatment. Clarifying that this form of hair loss is frequently reversible and associated with stress or nutrition provided them with relief. A straightforward regimen comprising iron supplements, rest, and a moderate topical therapy was typically sufficient. Significant improvement occurred within weeks, and their relief was evident even prior to the onset of regrowth. Cicatricial alopecia was, regrettably, the most challenging to manage. These victims arrived post-injury. The follicles have been replaced by scar tissue. The diagnosis was straightforward, but the discussion proved challenging. Articulating that the hair would not regrow was consistently challenging. We provided care focused on preventing more loss, mitigating irritation, and preserving the health of the remaining scalp. During these instances, compassion held greater significance than prescriptions. A middle-aged female patient with scars on the crown of her head expressed her desire to cease feeling ashamed when she gazed into the mirror. Our role evolved to providing her solace, rather than only facilitating rejuvenation [9].

This study indicated that alopecia in Surkhandarya is not merely a clinical issue to be addressed, but a personal difficulty necessitating comprehension and patience. For numerous individuals, genuine therapy commenced with the initial candid dialogue. Through attentive listening, prompt action, and empathetic responses, we discovered that even in a resource-constrained environment, we could assist individuals in regaining their sense of self.

Conclusion

The results of this study indicate that alopecia transcends a mere dermatological concern, representing a profoundly personal and frequently emotional experience for sufferers. The 71 patients at the Surkhandarya Regional Dermatovenerologic Dispensary presented not only with alopecia but also with anxiety, exasperation, and a quest for solutions. Their narratives and treatment experiences highlighted the significance of early diagnosis, personalized care, and compassionate communication. Conditions such as telogen effluvium and androgenetic alopecia exhibited favorable responses to conventional therapy when patients were actively involved, informed, and motivated to comply with treatment. These achievements frequently resulted in both apparent rejuvenation and restored self-assurance and relief. In alopecia areata, outcomes exhibited greater variability; nonetheless, continuous therapy and built trust facilitated development. Cicatricial alopecia serves as a reminder of the limitations of medicine, illustrating that at times, our greatest contribution may be stability and emotional support. The overarching conclusion from this study is that recovery is not solely derived from medications. It originates from nonjudgmental listening, informative education without inundation, and compassionate care without haste. In a resource-constrained region, these human factors were

equally essential as the clinical ones. Hair may either regenerate or not, nevertheless dignity, clarity, and compassion must invariably be integral to the conclusion.

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