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Analysis of hair loss in young adults- A clinical study

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Abstract
Background: Alopecia or hair loss is a common problem encountered in dermatology clinics.
Materials & Methods: The present study was conducted on 110 cases of hair loss of both genders. A thorough clinical examination was done. Scalp examination was done to see the presence of erythema, scaling, oozing, pustules, and follicular plugging. Hair examination was done and hair color, texture, fragility, hair shaft abnormalities, and hair root was examined.
Results: Out of 110 patients, males were 60 and females were 50. Pattern of alopecia was diffuse in 35 and patchy in 75, causes were congenital in 30 and acquired in 80, type was non cicatricial in 92 and cicatricial in 18. The difference was significant ($P < 0.05$). Associated symptoms were atopic dermatitis in 3, nail pitting in 2, leukonychia in 1, urticaria in 4 and vitiligo in 2. The difference was significant ($P < 0.05$).
Conclusion: Hair loss is a common phenomenon. The pattern of alopecia was diffuse and patchy, causes were congenital acquired, type was non cicatricial and cicatricial.

Keywords: Alopecia, Hair loss, Urticaria

Introduction

The term "alopecia" is used to describe hair loss. Alopecia or hair loss is a common problem encountered in dermatology clinics and may constitute a complex clinical problem in infants and children [1]. Hair loss in children has a profound psychological impact on the affected child as well as on parents [2]. Alopecia can be classified into congenital and acquired, noncicatricial and cicatricial, focal (patchy), and diffuse. Common causes of hair loss in children include tinea capitis, alopecia areata, bacterial infections, traction alopecia, trichotillomania, seborrheic dermatitis, pediculosis capitis, telogen effluvium, and folliculitis. In addition, other less common causes of hair loss can be seen including lichen planopilaris, thyroid disorders, iron deficiency, any nutritional deficiency, and congenital hair disorders [3].

Male pattern hair loss or Androgenic Alopecia (AGA), is the most prevalent type of hair loss in men. It affects 30 to 50% of men by the age of 50 years. Male pattern hair loss is often regarded as a relatively minor medical condition, but it may result in anxiety and depression in some men because it impacts self-image [4]. AGA is characterised by progressive thinning of the scalp hair and a reduction in hair density and diameter. Non-genetic causes have received little scientific attention, and data on environmental factors that may aggravate male AGA remain sparse [5]. Though hair loss is a common cosmetically and psychosocially distressing condition, it has not attracted much attention and there are limited studies on its prevalence and its grade in the Indian subcontinent. It is important to have further knowledge regarding its prevalence, grade of alopecia and its natural course for providing the appropriate management [6]. The present study was conducted to assess hair loss in young adults.

Materials & Methods

The present study was conducted in the department of Dermatology. It comprised of 110 cases of hair loss of both genders. The study was approved from the institutional ethical committee. All were informed regarding the study and written consent was obtained.

Data such as name, age, gender etc. was recorded. A thorough clinical examination was done. Scalp examination was done to see the presence of erythema, scaling, oozing, pustules, and follicular plugging. Hair examination was done and hair color, texture, fragility, hair

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shaft abnormalities, and hair root was examined. Results were subjected to statistical analysis. P value less than 0.05 was considered significant.
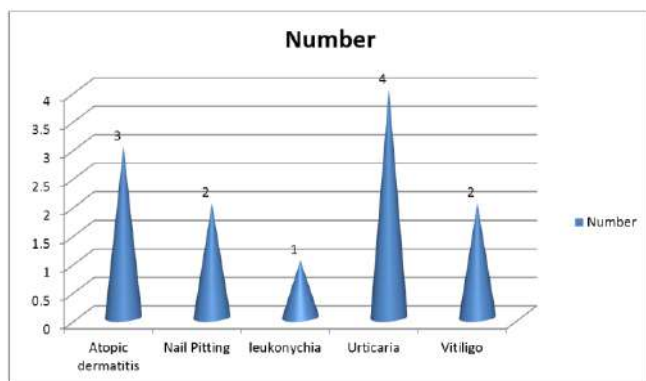
Results

Table I: Distribution of patients

	Total- 110	
Gender	Males	Females
Number	60	50

Table I shows that out of 110 patients, males were 60 and females were 50.

Table II: Clinical profile of patients

Parameters	Number	P value
Pattern of alopecia		
Diffuse	35	0.05
Patchy	75	
Causes of alopecia		
Congenital	30	0.01
Acquired	80	
Type of alopecia (%)		
Non cicatricial	92	0.01
Cicatricial	18	

Table II shows that pattern of alopecia was diffuse in 35 and patchy in 75, causes were congenital in 30 and acquired in 80, type was non cicatricial in 92 and cicatricial in 18. The difference was significant (*P*< 0.05).

Graph I: Associated symptoms in patients

Graph I shows that associated symptoms were atopic dermatitis in 3, nail pitting in 2, leukonychia in 1, urticaria in 4 and vitiligo in 2. The difference was significant (*P*< 0.05).

Discussion

Hair fall though thought of as a cosmetic problem can cause a lot of psychological morbidity and there is a paucity of literature in the Indian sub-continent about this disfiguring and distressing condition [7]. Alopecia is distressing to patients because of its effect on appearance, but the problem is often more than skin deep [8]. Physicians should not underestimate its importance, either as a cosmetic problem or as a sign of a potentially serious underlying condition. In most cases, alopecia is best managed with reassurance and education, but other cases require medical evaluation and therapy. The evaluation includes a personal and family history, physical examination, and sometimes laboratory

testing [9]. The present study was conducted to assess hair loss in young adults.

In this study, out of 110 patients, males were 60 and females were 50. Al- Refu *et al*. [10] found that a total of 393 men selected by simple random sampling in the age group of 18-50 years. The PHQ 9 questionnaire was applied to the participants following which the weight and height of the subjects were measured. Prevalence of hair fall was found to be 60.3%, prevalence of dandruff was found to be 17.1% and the prevalence of baldness was found to be 50.4%. Prevalence of greying among men aged 18-35 years was found to be 37.97%. Of the participants, 59% claimed awareness of creams and medications as a treatment option for hair related problems. Awareness of hair transplantation was present among 55.5% of the study subjects.

We found that pattern of alopecia was diffuse in 35 and patchy in 75, causes were congenital in 30 and acquired in 80, type was non cicatricial in 92 and cicatricial in 18. Associated symptoms were atopic dermatitis in 3, nail pitting in 2, leukonychia in 1, urticaria in 4 and vitiligo in 2. Cortés *et al*. [11] found that a total of 300 children presenting with scalp hair loss were studied. The most common disorder found in this study was tinea capitis seen in 166 (55.33%) cases followed by alopecia areata, seborrheic dermatitis, pediculosis with secondary infection. Other uncommon causes were lichen planopilaris, tractional alopecia, telogen effluvium, nevus sebaceous, occipital neonatal alopecia, ectodermal dysplasia, scalp psoriasis, trichotillomania, and alopecia due to nutritional deficiency. Several other rare causes were identified in this study.

Nnoruka *et al*. [12] found that hair fall was found to be more among higher socioeconomic status (Class I and Class II) which could be because of higher stress levels and other lifestyle-related factors. There was also a significant association between not using hair oil and hair loss. The prevalence of baldness in the present study was found to be 50.4 % which was comparable to the results of a study done on Norwegian men using the Norwood/Hamilton hair patterns, participants rated themselves as Class II (25.5%), III (8.6%), IV (8. 8%) or V or worse (19.5%). The mild differences could be because of the different population types and that the Norwegian study was based on self-reporting. Dandruff was seen in 17.1% of the study subjects which was comparable to the results of a community-based study done in the French population where 16.6% of the population reported to have flaking of the scalp.

Conclusion

Hair loss is a common phenomenon. The pattern of alopecia was diffuse and patchy, causes were congenital acquired, type was non cicatricial and cicatricial.

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