

ORIGINAL ARTICLE

Assessment of cases of androgenetic alopecia and its management

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ABSTRACT:

Background: Androgenetic alopecia, also known as male-pattern baldness or female-pattern hair loss, is a common form of hair loss that affects both men and women. The present study was conducted to assess cases of androgenetic alopecia. **Materials & Methods:** 94 cases of androgenetic alopecia of both genders were divided into 2 groups of 47 was made. Group I was pileous and group II was non pileous. All patients were prescribed Finasteride (1 mg per day) and if no adverse events occurred, the treatment was continued for at least 6 months. The effect of therapy was estimated as excellent, good, no change, or worse. **Results:** Out of 94 patients, males were 50 and females were 44. The body parts involved were head in 22, face in 10, arm in 6, dorsolumbar in 2, thighs in 3, thoracoabdominal in 2 and genitals in 2 cases in group I. The difference was significant ($P < 0.05$). The outcome of treatment in group I and group II was excellent in 32 and 27, good in 14 and 12, no change in 1 and 8 respectively. The difference was significant ($P < 0.05$). **Conclusion:** Finasteride is more effective for treating AGA patients who are pileous in other areas of the body.

Keywords: Androgenetic alopecia, finasteride, Women

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INTRODUCTION

Androgenetic alopecia, also known as male-pattern baldness or female-pattern hair loss, is a common form of hair loss that affects both men and women.¹ It is characterized by a gradual thinning of hair, typically starting at the temples or crown of the head in men and at the part line in women.² The term "androgenetic" refers to the role of androgens, which are male hormones (such as testosterone) that are also present in smaller amounts in women. In individuals genetically predisposed to androgenetic alopecia, these hormones can affect hair follicles, leading to miniaturization of hair follicles and eventually to hair loss.³

Several factors contribute to the development of androgenetic alopecia. Family history plays a significant role in determining whether an individual is predisposed to androgenetic alopecia.⁴ Androgens, particularly dihydrotestosterone (DHT), are believed to play a central role in the development of androgenetic alopecia. DHT can shrink hair follicles over time, leading to thinner and shorter hair strands.⁵ Androgenetic alopecia often becomes more noticeable with age, although it can start at any time after puberty. Various other factors such as stress, certain medications, and underlying medical conditions may exacerbate hair loss in individuals

predisposed to androgenetic alopecia, but they are not the primary cause.⁶ As a strong 5α -reductase inhibitor, finasteride (Propecia) is anticipated to halt the advancement of AGA when taken as a tablet or gel. There have also been reports on the efficacy of minoxidil, Serenoa repens (particularly for AGA of the vertex), and a combination of pharmacological therapy and hair transplant surgery.⁷ The present study was conducted to assess cases of androgenetic alopecia.

MATERIALS & METHODS

The present study consisted of 94 cases of androgenetic alopecia of both genders. All gave their written consent to participate in the study.

Data such as name, age, gender etc. was recorded. Based on whether the patient felt himself as pileous on areas other than the head, 2 groups of 47 was made. Group I was pileous and group II was non pileous). All patients were prescribed Finasteride (1 mg per day) and if no adverse events occurred, the treatment was continued for at least 6 months. The effect of therapy was estimated as excellent, good, no change, or worse based on each patient's self-assessment at the end of the observation period. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 94		
Gender	Male	Female
Number	50	44

Table I shows that out of 94 patients, males were 50 and females were 44.

Table II Body areas in group I as pileous

Body parts	Number	P value
Head	22	0.01
Face	10	
Arm	6	
Dorsolumbar	2	
Thigh	3	
Thoracoabdominal	2	
Genital	2	

Table II, graph I shows that body parts involved were head in 22, face in 10, arm in 6, dorsolumbar in 2, thighs in 3, thoracoabdominal in 2 and genitals in 2 cases in group I. The difference was significant (P< 0.05).

Graph I Body areas in group I as pileous

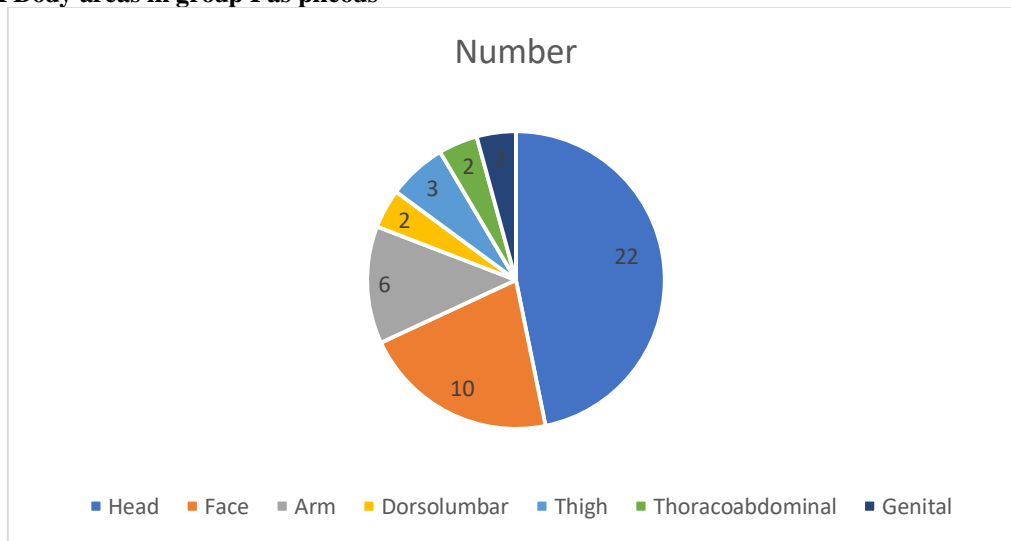


Table III Effectiveness of treatment in both groups

Outcome	Group I	Group II	P value
Excellent	32	27	0.05
Good	14	12	
No change	1	8	
Worse	0	0	

Table III shows that outcome of treatment in group I and group II was excellent in 32 and 27, good in 14 and 12, no change in 1 and 8 respectively. The difference was significant (P< 0.05).

DISCUSSION

Finasteride (for men) and minoxidil (for both men and women) are FDA-approved medications for the treatment of androgenetic alopecia.⁸ These medications work by either blocking the formation of DHT (finasteride) or promoting hair growth (minoxidil). Hair transplant surgery procedure involves transplanting hair follicles from areas of the scalp where hair is thicker to areas where hair has thinned or receded.⁹ Low-level laser therapy is non-invasive treatment involves using laser devices or combs to stimulate hair growth. Platelet-rich plasma (PRP) therapy involves injecting a concentration of the patient's own platelets into the scalp to stimulate hair growth.¹⁰

We found that out of 94 patients, males were 50 and females were 44. Inadomii¹¹ investigated the effects of finasteride on hair, including the head and other areas of the body. Based on whether AGA patients felt they

were pileous in areas other than the head, they were divided into Group A (pileous) or Group B (not pileous). Finasteride (1 mg/day) was prescribed for both groups for at least 6 months, after which patients were asked to estimate the medicine's effects and any changes of their hair growth. A total of 18 out of 37 patients were placed in Group A and 19 of them were in Group B, suggesting that about half of AGA patients in Japan are pileous in other parts of the body. Oral finasteride was effective (excellent or good) in 22 out of 37 (59.5%) patients overall, in 16 out of 18 (88.9%) patients in Group A, and in 6 out of 19 (31.6%) patients in Group B. None of the patients reported that oral finasteride had any effect on their hair growth other than on their head. Finasteride is more effective for treating AGA patients who are pileous in other areas of the body.

We found that body parts involved were head in 22, face in 10, arm in 6, dorsolumbar in 2, thighs in 3,

thoracoabdominal in 2 and genitals in 2 cases in group I. Hajheydari et al¹² compared the local and oral finasteride in the treatment of androgenic alopecia. The patients were randomly divided into two: topical finasteride (A) and oral finasteride (B) groups. Topical finasteride group (A) received a topical gel of 1% finasteride and placebo tablets, while the oral finasteride group (B) received finasteride tablets (1 mg) and gel base (without drug) as placebo for 6 months. The patients were followed by clinical observation and recording of side effects prior to the treatment and at the end of first week, and then by a monthly follow-up. The size of bald area, total hair count, and terminal hair were studied. The mean duration of hair loss was 18.8+/-23.10 months. Each month the terminal hair, size of bald area and hair count between the two groups were compared. There were no significant differences between the two groups as a viewpoint of hair thickness, hair counts and the size of bald area. Serial measurements indicated a significant increase in hair counts and terminal hair counts between the two groups.

We found that outcome of treatment in group I and group II was excellent in 32 and 27, good in 14 and 12, no change in 1 and 8 respectively. Kawashima et al¹³ identified the optimal dosage of finasteride and to evaluated its efficacy and safety in the treatment of Japanese men with male pattern hair loss. 414 Japanese men with male pattern hair loss received finasteride 1 mg (n = 139), finasteride 0.2 mg (n = 137), or placebo (n = 38) once daily for 48 weeks. Efficacy was evaluated by global photographic assessment, patient self-assessment, and investigator assessment. All efficacy endpoints showed significant improvement with finasteride therapy by 12 weeks (p < 0.05 versus placebo). At 48 weeks, 58%, 54%, and 6% of men in the finasteride 1 mg, finasteride 0.2 mg, and placebo groups, respectively, had improved based on assessments of global photographs. All efficacy endpoints were numerically superior for the 1 mg dose over the 0.2 mg dose at 48 weeks. Finasteride treatment was generally well tolerated. Finasteride 1 mg/day slows hair loss and improves hair growth in Japanese men with male pattern hair loss.

The limitation of the study is the small sample size.

CONCLUSION

Authors found that finasteride is more effective for treating AGA patients who are pileous in other areas of the body.

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