Research Article

A study of psychological aspects of patients undergoing hair transplantation for androgenetic alopecia

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Abstract

Introduction: Androgenetic alopecia is an important and common cause for baldness. The consequences of Androgenetic alopecia is predominantly psychological. The aim of the present study was to study the psychological aspects of patients undergoing hair transplantation for Androgenetic alopecia. Psychological aspects of patients were evaluated before and after hair transplantation. Majority had a positive family history of Androgenetic alopecia and were unmarried. Androgenetic alopecia was definitely a stressful situation for most of the patients. There was a significant improvement in the physical, mental, and social health and self esteem after the procedure. Anxiety and depression score also decreased significantly.
Keywords: Androgenetic alopecia, Hair transplantation.

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INTRODUCTION

Androgenetic alopecia (AGA) is a common genetically predisposed condition, characterized by progressive patterned hair loss from the scalp. In AGA, terminal follicles are progressively transferred to vellus follicles. AGA affects well over one half of adult male population. It is a biologically benign, appearance altering trait that may significantly affect a variety of psychological and social experiences and individual quality of life. AGA leads to some amount of stress to most of the patients. Hair is a important facet of human appearance that is commonly used for recognition and is one determinant of physical attractiveness.[1,2,3,4]

Hair transplantation is a relatively simple day care procedure that can do wonder for people who suffer from hair loss of androgenic origin. Since the hair used come from the occipital area that is not sensitive to the balding process, it will be permanent. Integration of stress coping strategies and development of new therapeutic agents for the management of AGA might help in the alleviation of clinical symptoms as well as the concomitant psychological implication.[3,4]

MATERIALS AND METHODS

30 patients attending Bangalore Medical College and Research Institute for Hair transplantation were studied to study the psychological aspects of patients with and rogenetic alopecia before and after the procedure. Male patients between 20-40 years with patterned hair loss confined to front temporal area of the scalp were included in the study. Patients suffering from psychological disorders were excluded. Clinical, social and demographic data was collected with a semi structured proforma. Psychological aspect of the patient was evaluated before and six months after Hair transplantation, with the help of the questionnaire. Each patient's consent was taken for voluntary participation in

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the study. Confidentality was maintained for the information given by the patient. Trimean was calculated for all the parameters of quality of life and significance has been obtained by Wilcoxon Signed rank test between before and after Hair transplantation. Trimean was calculated as (Q1+2Q2+Q3)/4 where Q1, Q2 and Q3 were first, second and third quartiles. Statistical software SPSS 11.0 and Systat 8.0 were used for the analysis of the data.

OBSERVATIONS AND RESULTS

30 males were included in the study. Mean age of the study group was 28.10 years. 25 were unmarried.

A family history of AGA was present in 26 patients. Majority (26) had Hamilton grade 3 or 4 AGA. Mean age of onset of AGA was 21.93 years. To evaluate the psychological aspects of the patients, physical health score, mental health score, social health score, self esteem score, depression score and anxiety score were calculated before and after Hair transplantation. Higher scores indicates good health for physical, mental, social and self esteem scores, whereas lower score indicates good health for anxiety, depression and general health score.

Table 1

Parameters	Treatment		P value
	Before	After	
Physical health score	89.37	96.88	<0.001
Mental health score	75.63	82.50	<0.001
Social health score	75.63	80.00	<0.001
Self esteem score	77.50	90.00	<0.001
Inference	All the score have significantly improved after treatment (P<0.001)		

Table 2: Effect of on Anxiety, depression, disability and General health score

Parameters	Treatment		P value
	Before	After	
Anxiety	18.75	9.75	<0.001
Depression	20.00	11.9	<0.001
Disability	0	0	-
General health score	12.75	6.69	<0.001
Inference	All the score have significantly improved after treatment (P<0.001)		

DISCUSSION

30 patients with AGA came for Hair transplantation were studied. Patients studied were between the age group 23-36. Mean age of the patients were 28.10. 25 patients (83.3%) were not married. A family history of AGA was present in 26 patients (86.7%). Only 4 patients (13.3%) did not have family history of AGA. The mean age of onset of AGA was 21.93. Majority of the patients studied had grade III or IV Hamilton grade AGA. All the patients were concerned about their hair loss. To evaluate psychological aspects of the patients physical health score, mental health score, social health score, self esteem score, anxiety score, depression score and general health score were calculated before and after Hair transplantation and compared. There was significant improvement (P value<0.001) in physical, mental, social health, general health, self esteem score and also decrease in anxiety and depression score after Hair transplantation. A study in U.S.A by Cash, Price et.al; randomly sampled 145 men who were not seeking or receiving AGA pretreatment. Standardized measures assessed body image and psychological functioning, greater percentage of men with more versus less extensive hair loss (59% versus 31%) reported stress due to AGA. Balding men especially those with extensive AGA had less overall body image satisfaction compared with non balding. Balding men reported increased stress and distress concerning their hair loss.[5] Study done by Lee, Ha *et al* found that balding men were perceived as being older and less attractive by over 90% of the respondents. A perception that balding men are less attractive was significantly more common among women than among non balding men [6]. A study done by Budd, Himmelberg, Rhodes *et al* similarly found more body image distress with increased hair loss but concluded that AGA was unrelated to global measures of physical and mental health.[7] Wells *et al* studied 182 men who were unaware that the research concerned hair loss. With age controlled population, greater observer related hair loss was associated with poor self esteem, body image and with greater depression, introversion and neuroticism.[8] 2 Italian studies considered the extent to which personality disorders are disproportionately present in AGA patients. First study included 285 men and women with AGA and found that 83.5% exhibited some personality disorder relative to an estimated 10.3% population based rate.[9] In the second study a standardized self report assessment of

personality disorder revealed a prevalence of 76.3% among 116 AGA patients, again greatly exceeding the population estimate.[10] A Dutch investigation of 58 treatment seeking women found that AGA exerted negative effects on the daily lives of 88%, with report of lowered self esteem for about 75%, social difficulty for 50% and general mal adjustment in nearly one third. The women with AGA experienced poor social adequacy and more psychological problems than did female control and male AGA patients and they found lower self esteem and self esteem and psychological adjustment than did men with AGA. Women with AGA had a more negative body image, more social anxiety, greater externality in locus of control, as well a poorer self esteem, psychological well being and life satisfaction.[11] In present study psychological aspects of the patients were evaluated after Hair transplantation. All were concerned about hair loss. Most were unmarried. Majority of them had come for Hair transplantation to improve their look. There was definite psychological improvement after Hair transplantation as indicated by improvement in their score. Proper selection is important for hair transplantation. Good psychiatric counseling is a must before Hair transplantation. Patients with unrealistic expectation should be discouraged.

CONCLUSIONS

AGA is a common genetically predisposed condition, usually starts as a patterned hair loss during late adolescence or early adulthood with bi temporal recession of the frontal hair line. A positive family history is an important predisposing factor. Scalp hair is of great significance in human life. It contributes virtually to youthful appearance of an individual and is an important element of self expression. Individuals with hair loss have a feeling of being less attractive and older than their peers with diminished self esteem and social inadequacy. There was a definite improvement in the psychological aspect of patients after Hair transplantation. Integration of stress coping strategies and development of new therapeutic agents for the management of AGA might help in the alleviation of clinical symptoms as well as the concomitant psychological implication.

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