

E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

Quality of Life in Patients Living with Androgenetic Alopecia: A Cross-Sectional Observational Study

Abhay Paul Baghwar¹, Arun Chandran Ramachandran²

¹Intern, PharmD, Acharya and BM Reddy college of Pharmacy, Bengaluru ² Assistant Professor, Acharya and BM Reddy college of Pharmacy, Bengaluru

Abstract

Alopecia is a chronic dermatological disorder in which people lose some or all of the hair on their head and sometimes on their body as well. It is a chronic inflammatory disease that affects the hair follicles. It is neither life threatening nor painful, though there can be irritation of the skin, as well as physical problems resulting from the loss of eyelashes and eyebrows. This study aim to improve the quality of life and prescription pattern in androgenic alopecia. The goal of the study was to assess the quality of life of subjects living androgenic alopecia and to assess the prescription pattern of subjects with androgenic alopecia. This was a cross sectional observational study. The study was conducted Outpatient department of Dermatology in ESI MC PGIMSR, Rajajinagar. All the subjects (n=36) meeting the inclusion and exclusion criteria were briefed about the purpose of the study and the informed consent was obtained. The subject's demographic details and responses were collected with the help of a standardized questionnaire. The collected data were entered in Microsoft Excel and appropriate descriptive analysis was performed. It was observed that a majority of the subjects were prescribed with minoxidil 5% (58.33%). On comparing the QOL scores, in each domain it was found that emotion has the highest average while the function has lowest average. scores in subjects of different age groups, it was found that the subjects belonging to the age groups 26-35 groups had high average scores (32.84%) and 36-45 groups had low average scores (28.96%). From this study, we got to know that the quality of life of male gender is affected more rather than female. Minoxidil 5% was most commonly prescribed drug and overall dosage form prescribed were topical agent.

Keywords: Quality of life, Androgenetic Alopecia, Treatment.

Introduction

Alopecia is a chronic dermatological disorder in which people lose some or all of the hair on their head and sometimes on their body as well. It is a chronic inflammatory disease that affects the hair follicles. It is neither life threatening nor painful, though there can be irritation of the skin, as well as physical problems resulting from the loss of eyelashes and eyebrows (1). Alopecia has been shown in multiple studies to have a psychosocial impact in both men and women; however, the impact may be more severe and devastating in women. In a study population it is found that male alopecia patients are more likely to be diagnosed in childhood [age <10 years], On the other hand, female alopecia patients are more likely to be diagnosed in adolescence [age 10-20 years] (3).Depression and anxiety were more prevalent in peo-



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

ple diagnosed with alopecia. People with alopecia have higher rates of depression and anxiety than those without alopecia.

Patients with alopecia and mental health symptoms may benefit from individualized communication strategies aimed at supporting the patient. Alopecia is linked to an increase in mental health symptoms, and among individuals with alopecia, psychological distress and depressive symptoms were linked to worse overall patient satisfaction. Low health care satisfaction in the setting of a chronic condition may worsen mental health symptoms. Mental health symptoms worsen patient satisfaction, and low patient satisfaction contributes to the patient's mental health burden. Having negative encounters with medical treatment might also result in signs of mental illness. The link between alopecia and a greater burden on mental health recommends that practitioners should be cautious in monitoring and treating mental health problems.

Purpose of the study

To assess the quality-of-life patients with androgenic alopecia.

To assess the prescription pattern of patients with androgenic alopecia

Material and Methods

This is a cross sectional observational study. This is a 6 months study was conducted at Out- Patient Department of Dermatology, ESI PGIMSR, Rajajinagar of Bengaluru District.

The Sample size was found to be 36 patients.

Inclusion criteria:

a. Subjects above 18 years of age.

Exclusion criteria:

- a. Pregnant women are excluded
- b. Participants who are not willing to participate for the study.

Statistical analysis:

All recorded data were entered using MS Excel software and analyzed using the same for determining statistical significance. Descriptive statistics were computed for quantitative variables and frequencies and percentages were calculated for categorical variables. Column charts applied to find the nature of data distribution.

Results:

This study was conducted in Out-patient department of dermatology Rajajinagar. The study was carried out for a period of 3 month, and a total of 39 of sample were collected out of this 3 sample were dropped due to insufficient data and overall sample size was 36.

Table1: Distribution of subjects by age category

Agecategory	Number(n)	Percentage(%)
18-25	13	36.11%
26-35	13	36.11%
36-45	9	25.00%
≥ 46	1	2.78%
Total	36	100.00%



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

Outofthe 36 subjects, 13(36.11%) subjects were from the age group of 18-25 years, 13(36.11%) were of 26-35 years, 9(25%) were between 26-45 years, and 1(2.78%) subject were above ≥ 46 years of age. The mean age of the subjects was found to be 35.25.

Table2: Distribution of subjects by gender

Gender	Numberofsubjects (n)	Percentage (%)
Male	24	66.66
Female	12	33.34
Total	36	100.00

Inourstudy,outof36 sample,majorityweremales(66.66%)thanthat offemales(33.34%).

Table 3: Distribution based on drug usage

Medication	Number	Percentage
KetoconazoleLotion2%	2	5.56%
MicronutrientCPlusCaps	2	5.56%
Minoxidil2%	8	22.22%
Minoxidil5%	21	58.33%
Mupirocinointment	3	8.33%
Total	36	100%

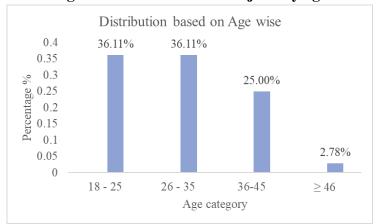
Outof36subjects,mostcommonlyprescribeddrugareMinoxidil5%(58.33%),followedbyMinoxidil2%(22.22%),mupirocinointment(8.33%),ketoconazole(5.56%),micronutrientCpluscaps(5.56%).

Table 4: Distribution based on age

AGE	SYMPTOMS	EMOTION	FUNCTION	AVERAGE
18-25	26.38	31.84	28.6	28.98
26-35	31.53	36.38	30.61	32.84
36-45	38	31.6	17.3	28.96

On comparing the quality of life scoresin subjects of different age groups, it was found that the subjects belong ing to the age groups 26-35 groups had high averages cores and 36-45 groups had low averages cores.

Figure 1: Distribution of subjects by age





E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

Outofthe 36 subjects, 13(36.11%) subjects were from the age group of 18-25 years, 13(36.11%) were of 26-35 years, 9(25%) were between 26-45 years, and 1(2.78%) subject were above ≥ 46 years of age. The mean age of the subjects was found to be 35.25.

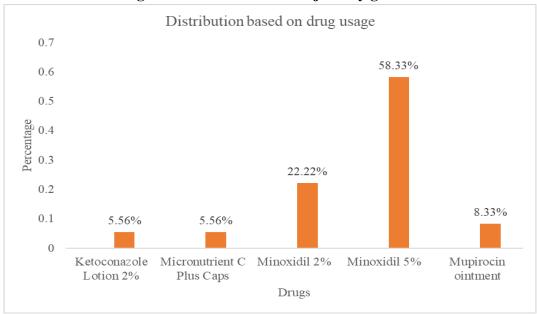


Figure 2:Distribution of subjects by gender

Inourstudy,outof36 sample,majorityweremales(66.66%)thanthat offemales(33.34%).

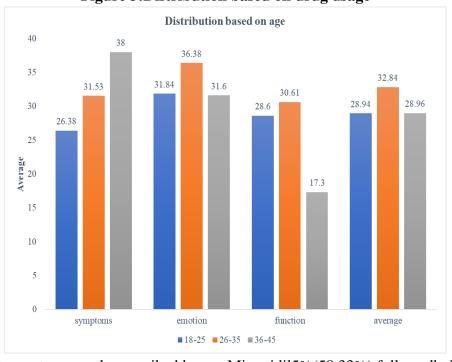


Figure 3:Distribution based on drug usage

Out of 36 subjects, most commonly prescribed drug are Minoxidil 5% (58.33%), followed by Minoxidil 2% (22.22%), mupirocino intment (8.33%), ketoconazole (5.56%), micronutrient Cplus caps (5.56%).



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

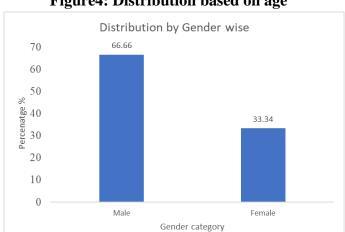


Figure4: Distribution based on age

Discussions

Thisobservationalstudy was conducted in Out-patient department of dermatology ESIPGIMSR & MC, Rajajinagar, Bengalurufora period of 3 months from June 2023 to September 2023. A total number of 36 subjects were enrolled in the study based on inclusion and exclusion criteria.

The number of males in the study were found to be 24 (66.66%) and females found to be 12(33.34%) where male being more than female. The maximum numbers of patients were in theage groupof18–25(36.11%) yearand26–35 year (36.11%). (Figure 4).

Overall subjects were ontopical drugsminoxidil 0.5%.

Inourstudy, it was found that emotion sub

domainofSkindex-

16wasmoreadverselyaffectedinAGApatientsfollowedbysymptomsandfunctionsub domain.Itisnotablethatthepresentstudy,scoresreportedforemotional,functional,and symptomsub domainwere34.47%,31%,and 27.3%, respectively; which was similar to study conducted by **Lohia** *et al.*, **(February2021).**Studyshowedthatis similartoprevious study(Figure 6).

In our study, it was found out that age group between 26-35 years had high average scores(32.84%)where as 36-45yearhadlowaverage scores(28.96%).

Hence, it implies that the dermatologist should provide relevant treatment, not just for hairloss, but also tend to the emotional anguish faced by the mintheir daily lives.

Conclusion

In our study, we found that differences in how a patient experiences their condition can have abig impact on how the disease affects their quality of life as well as their psychological andemotionalwell-being. The psychological stress experienced by such individual smight be considerably decreased by counseling explaining the likely causes, and significance for treatment compliance. Our results highlight how importantitisf or dermatologist stounders tand the effects of hair

lossonpatients'lives, as well as how patients and physicians perceive and adjust treatment plans appropriately. This study conducted that male subjects were more pronethan female subjects based on a gewise distribution subjects between 18-35 years of age were admitted more with the complaints of Androgenetic Alopecia. The most commonly prescribed drugwas Minoxidil 5% and the prescribed dosage for mwas tropical agents.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

Conflict of Interest

There is no conflict of interest.

Acknowledgement

We express our sincere gratitude to all those people who have been associated with this study and have helped us with it.

References

- 1. Prat
 - tCH,KingLEJr,MessengerAG,ChristianoAM,SundbergJP.Alopeciaareata.NatRevDisPrimers[Internet].2017;3(1).Availablefrom:http://dx.doi.org/10.1038/nrdp.2017.11
- 2. Rambwawasvika H. Alopecia types, current and future treatment. J Dermatol Cosmetol[Internet].2021;5(4):93–9. Available-from:http://dx.doi.org/10.15406/jdc.2021.05.00190
- 3. ArndtKA,HsuJT,AlamM,BhatiaAC,ChilukuriS.ManualofDermatologicTherapeutics(Lippincott ManualSeries).8thed.SaintPaul,MN:LWW;2014.
- 4. Lundin M, Chawa S, Sachdev A, Bhanusali D, Seiffert-Sinha K, Sinha AA. Genderdifferencesina-lopeciaareata. JDrugsDermatol [Internet]. 2014[cited 2023 Oct 30]; 13(4). Available from: https://pubmed.ncbi.nlm.nih.gov/24719059/
- 5. Harries M, Macbeth AE, Holmes S, Chiu WS, Gallardo WR, Nijher M, et al. Theepidemiologyofalopeciaareata:apopulation-basedcohortstudyinUKprimarycare.BrJDermatol[Internet].2022[cited2023 Oct30];186(2):257–65.Availablefromhttps://pubmed.ncbi.nlm.nih.gov/34227101/
- KimAB, ChengBT, HassanS. Association of mental healthout comes and lower patients at is faction among ad ults with a lopecia: Across-section alpopulation-based study. JAAD Int [Internet]. 2022 [cited 2023 Oct 30]; 8:82

 8. Available from: https://pubmed.ncbi.nlm.nih.gov/35769597/
- 7. . Hunt N, McHale S. The psychological impact of alopecia. BMJ [Internet]. 2005 [cit-ed2023Oct30];331(7522):951–3. Available-from: https://pubmed.ncbi.nlm.nih.gov/16239692/
- 8. Komen MMC, van den Hurk CJG, Nortier JWR, van der Ploeg T, Smorenburg CH, vanderHoeven JJM.Patient-reported outcomeassessmentand objectiveevaluation ofchemotherapy-induced alopecia. Eur J Oncol Nurs [Internet]. 2018;33:49–55. Available-from: http://dx.doi.org/10.1016/j.ejon.2018.01.001
- 9. Tahir K, Aman S, Nadeem M, Kazmi AH. Quality of life in patients with androgenetical opecia. AnnKingEdwMedUniv[Internet]. 2013[cited2023Nov13];19(2):150–150. Available from: https://www.annalskemu.org/journal/index.php/annals/article/view/500
- 10. GuptaM.Qualityoflifeassessmentinmaleswithandrogeneticalopecia—aprospectivestudy.OurDermOnline[Internet].2019;10(4):344—8.Availablefrom: http://dx.doi.org/10.7241/ourd.20194.6
- 11. BishwokarmaGhimireR.Impactonqualityoflifeinpatientswhocamewithandrogenetic alopecia for hair transplantion surgery in a clinic. JNMA J Nepal MedAssoc[Internet].2018[cited2023Nov10];56(212):763–
 - 5.Availablefrom: https://pubmed.ncbi.nlm.nih.gov/30387465/



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

- 12. Zhang M, Zhang N. Quality of life assessment in patients with alopecia areata and androgenetic alopecia in the People's Republic of China. Patient Prefer Adherence[Internet].2017;11:151–5. Available from: http://dx.doi.org/10.2147/ppa.s121218
- 13. Janković S, Perić J, Maksimović N, Ćirković A, Marinković J, Janković J, et al. Qualityoflifeinpatientswithalopeciaareata:ahospital-basedcross-sectionalstudy. JEur Acad Dermatol Venereol [Internet]. 2016 [cited 2023 Nov 10];30(5):840–6. Available from: https://pubmed.ncbi.nlm.nih.gov/26660721/