PREVALENCE OF SCALP DISORDERS AMONG OUTPATIENTS ATTENDING DERMATOLOGY DEPARTMENT IN A SEMI-URBAN SETUP: A CROSS SECTONAL OBSERVATIONAL STUDY

Ram Gulati1, Manisha Nijhawan2, Savita Agarwal3, Isha Gupta4, Shilpa Soni5, Vibhor Goyal6, Pallavi Goyal7, Dinesh Mathur8

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ABSTRACT: Scalp disorders are quite prevalent in general population.(1) Though some epidemiological literature exists on prevalence of specific disorders involving scalp, prevalence of scalp involvement in general or specific groups of population have not been largely studied. We studied all patients attending our outpatients department over one week to assess the prevalence of scalp conditions in these attendees. Substantial number of patients was found to have incidental scalp findings some of which corroborated the diagnosis and some needed treatment. Scalp should therefore be examined in all patients presenting to the Dermatology outpatients.

KEYWORDS: Dermatology, scalp disorder.

INTRODUCTION: Scalp disorders are quite prevalent in general population.(1) Though some epidemiological literature exists on prevalence of specific disorders involving scalp, prevalence of scalp involvement in general or specific groups of population have not been largely studied.(2,3,4,5) Our department works in a medical college hospital setting with the college location providing equal access to both rural and urban population. This offers us an excellent chance to study an optimum mix of disorders. We studied patients attending our outpatients department to assess the prevalence of scalp conditions in these attendees.

MATERIAL AND METHODS: The study was conducted at Department of Dermatology, Mahatma Gandhi Hospital, Sitapura, Jaipur. Scalp of first all patients attending the department over a fortnight were examined for any disease, disorder or abnormality. Demographic details including age, sex, residential background (urban/rural) and occupation were noted. Details of scalp examination and the presenting diagnosis were noted and a note was made whether the scalp condition, if present, was related to the presenting diagnosis or was entirely incidental. The findings were then analysed.

RESULTS: 602 patients were examined comprising of 280 males (46.5%) and 322 females (53.5%). 382(63.5%) attendees were from the urban background while 220(36.5%) from rural. The patients’ age ranged from 7 months to 76 years. (Table 1).

| Age range (years) | Number (n = 602) | Percentage |
|-------------------|-----------------|------------|
| Less than or equal to 15 | 71 | 11.8% |
| 16-29 | 280 | 46.5% |
| 30-44 | 113 | 18.8% |
| 45-59 | 77 | 12.8% |
| More than or equal to 60 | 61 | 10.1% |

Table 1: Age distribution of the patients
Most of the patients were students (233, 38.7%). Rest of the patients comprised of teachers, retired servicemen and servicewomen, housewives, farmers, shopkeepers, self-employed, labourers, army servicemen and young children. (Table 2).

| Occupation                  | Number (n = 602) | Percentage |
|-----------------------------|------------------|------------|
| Students                    | 233              | 38.7%      |
| Housewives                  | 131              | 21.8%      |
| Farmers                     | 88               | 14.6%      |
| Labourers                   | 33               | 5.5%       |
| Teachers                    | 25               | 4.1%       |
| Self employed               | 23               | 3.8%       |
| Shopkeepers/assistants      | 22               | 3.7%       |
| Young children (< 5 yrs)    | 22               | 3.7%       |
| Retired servicemen/women    | 20               | 3.3%       |
| Army servicemen             | 5                | 0.8%       |

Table 2: Occupation of patients

The complaints for which patients attended the outpatient department were variable. The dermatological diagnoses made on the patients are shown in Table 3.

| Diagnosis                          | Number (n = 602) | Percentage |
|------------------------------------|------------------|------------|
| Acne                               | 128              | 21.3%      |
| Eczematous disorders               | 122              | 20.3%      |
| Male/female pattern alopecia       | 54               | 9%         |
| Scabies/pediculosis                | 41               | 6.8%       |
| Urticaria                          | 39               | 6.5%       |
| Papulosquamous disorders           | 37               | 6.1%       |
| Superficial fungal infections      | 28               | 4.6%       |
| Viral infections                   | 23               | 3.8%       |
| Disorders of hyperpigmentation     | 22               | 3.6%       |
| Bacterial infections               | 22               | 3.6%       |
| Seborrheic capitis                 | 16               | 2.7%       |
| Vitiligo                           | 12               | 2%         |
| Plantar keratoderma/callosity      | 11               | 1.8%       |
| Steroid induced facial telangiectasie | 11              | 1.8%       |
| Immunobullous disorders            | 10               | 1.6%       |
| Telogen effluvium                  | 6                | 1%         |
| Miscellaneous                      | 20               | 3.2%       |

Table 3: Dermatological diagnoses of patients attending the OPD

109 patients (18.1%) had scalp involvement which was related to the signs and symptoms the patients presented with, while 181 patients (30%) had scalp findings unrelated to the presenting
features and diagnoses. The incidental findings in scalp in the latter group included dandruff, male pattern alopecia, premature greying, matting of hair, hemangioma, cradle cap, sparse hair and woolly hair. (Table 4).

| Incidental Scalp findings        | Number (n=181) |
|----------------------------------|---------------|
| Dandruff                         | 96            |
| Male pattern alopecia            | 33            |
| Premature greying                | 27            |
| Sparse hair                      | 15            |
| Cradle cap                       | 7             |
| Matting of hair                  | 1             |
| Hemangioma                       | 1             |
| Woolly hair                      | 1             |

Table 4: incidental scalp findings in patients attending OPD for other reasons

DISCUSSION: Scalp disorders, diseases and abnormalities are quite prevalent in general population, though many of these are not a cause of concern for the patients or parents. However, these features may be very helpful in diagnosing the patient’s disorder, and moreover may need treatment.

Our study had slightly more females (53.5%) than males, with most patients from urban background (63.5%). Most outpatient attendees belonged to the age range 16-29 years. The above findings are most likely due to the location of our hospital in an institutional area, with many educational institutions in the surrounding. The hospital has easy access not only from adjacent Jaipur town area, but regular transport is available from surrounding villages too. Majority of the patients were students studying in the surrounding institutions. Housewives were the second largest group followed by farmers and labourers. The most common presenting diagnosis was acne, which is quite evident considering that adolescents formed the major group attending our department. Eczematous diseases formed the second major group with airborne contact dermatitis and photodermatitis being the most common conditions.

Dermatological diagnoses which were directly related to scalp included male/female pattern alopecia, eczema, pediculosis, psoriasis, bacterial infections, seborrheic capitis and telogen effluvium. However, examining scalp of 602 outpatient attendees revealed presence of scalp findings in an additional 181 patients forming 30% of the group. These findings included dandruff, male pattern alopecia, premature greying, matting of hair, hemangioma, cradle cap, sparse hair and woolly hair. These findings can not only help in getting to the dermatological diagnosis, but may need treatment as well. It is therefore imperative that scalp examination should be included as part of complete skin examination in all patients attending dermatology outpatients.

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AUTHORS:
1. Ram Gulati
2. Manisha Nijhawan
3. Savita Agarwal
4. Isha Gupta
5. Shilpa Soni
6. Vibhor Goyal
7. Pallavi Goyal
8. Dinesh Mathur

PARTICULARS OF CONTRIBUTORS:
1. Assistant Professor, Department of DVL, Mahatma Gandhi Hospital, RIICO Institutional Area, Jaipur.
2. Professor, Department of DVL, Mahatma Gandhi Hospital, RIICO Institutional Area, Jaipur.
3. Senior Resident, Department of DVL, Mahatma Gandhi Hospital, RIICO Institutional Area, Jaipur.
4. Senior Resident, Department of DVL, Mahatma Gandhi Hospital, RIICO Institutional Area, Jaipur.
5. Resident Doctor, Department of DVL, Mahatma Gandhi Hospital, RIICO Institutional Area, Jaipur.
6. Resident Doctor, Department of DVL, Mahatma Gandhi Hospital, RIICO Institutional Area, Jaipur.
7. Resident Doctor, Department of DVL, Mahatma Gandhi Hospital, RIICO Institutional Area, Jaipur.
8. Professor & HOD, Department of DVL, Mahatma Gandhi Hospital, RIICO Institutional Area, Jaipur.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Ram Gulati,
Flat B-1, 367,
Adarsh Nagar,
Jaipur-302004,
Rajasthan.
E-mail: dr_ramgulati@yahoo.com

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