Abstract

Background: Childhood alopecia areata (AA) is a common cause of dermatologic consultation; however, data is scarce in the present set-up. Objectives: To evaluate the clinico-epidemiological profile of childhood AA along with dermoscopic correlation. Methods: We conducted a cross-sectional study including 50 new cases of childhood AA for 1 year. Dermoscopy was performed in each child and findings recorded. Results: Childhood AA was more common in girls (M: F 1:1.4), mean age being 11.1 ± 3.7 years. Scalp was commonest site of involvement in 86% cases, while 32 (64%) children had mild disease (<25% involvement). Localized circumscribed patch was the commonest presentation in 37 (74%) children, while sisaiphlo was the least (2%). A positive family history of AA was noted in 5 (10%) children. Twenty-four children (48%) provided a history of atopic disorders, while 30% had a positive family history of atopy. Stress was the commonest precipitating factor in 13 (26%) subjects. Nail involvement was observed in 19 (38%) children (pitting > thinning), while systemic associations like vitiligo and thyroid dysfunction were present in 26% and 24% cases, respectively. Dermoscopy revealed yellow-dots to be the commonest finding in 44 (88%) cases, followed by short vellus hair and black dots in 76% and 28% children, respectively, while exclamation-mark hair was rare. Conclusion: Female gender, younger age, nail involvement, and presence of concomitant atopy, vitiligo, and thyroid dysfunction were associated with severe disease, but not statistically significant (p > 0.05). Regression model failed to detect any risk factors for severe AA. Dermoscopy is an important non-invasive tool for evaluating childhood AA.

Keywords: Alopecia areata, atopy, childhood, dermoscopy

Introduction

Alopecia areata (AA) is a relatively common autoimmune disorder manifesting as recurrent episodes of non-scarring hair loss. Despite being a benign condition, it can exert tremendous emotional and psychological impact on the patients and their care-givers.\(^1\)

AA has a variable prevalence ranging from 2.1% in the USA and 2.3% in Saudi Arabia to 0.7% in India.\(^2\) Approximately 1.7%–2% of the general population has a life-time risk of developing AA.\(^2,3\) Pediatric alopecia areata (aged ≤16 years) can account for almost 20% of all cases,\(^4,5\) however, a recent study has shown it to be much lower at 5%.\(^2\) This variety is important because a younger age of onset is an established poor prognostic factor.\(^5,6\)

Several pathogenic factors have been identified like infection, autoimmunity, psychological stress, and genetic predisposition,\(^2\) however, T-cell mediated autoimmune destruction of hair follicles is the most accepted theory.\(^1,2,7\) Additionally several contributory factors may worsen its prognosis like personal/family history of atopy, family history of alopecia areata and other autoimmune disorders including vitiligo, autoimmune thyroid disease or pernicious anemia.\(^7,8\)

Based on extent of involvement, there are 3 principle types of AA- patchy, alopecia totalis and alopecia universalis.\(^1,2,7\) Based on pattern of involvement, other subtypes are-ophiasis, sisaiphlo, and diffuse form.\(^1,2\) According to Thomas et al.,\(^9\) severity of AA may be graded as mild (≤3 patches, localized), moderate (>3 patches, localized) and severe (patches and/or alopecia totalis or universalis). Severe disease and ophiasis pattern are poor prognostic factors.

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Despite being a clinical diagnosis, histopathology is confirmatory in doubtful cases.\textsuperscript{[3]} However, biopsy is difficult in the pediatric population; so, dermoscopy has emerged as a non-invasive confirmatory tool with varying degrees of sensitivity and specificity.\textsuperscript{[10,11]}

Although several clinico-epidemiologic studies of AA exist in adults, data on children are limited,\textsuperscript{[4]} especially in the present set-up. So, we undertook this study to assess the clinico-epidemiologic profile of pediatric alopecia areata along with its dermoscopic correlation.

**Materials and Methods**

We conducted a prospective, cross-sectional study from January 2019 to December 2019 (12 months) at the Dermatology department of a tertiary care center, Eastern India. We enrolled 50 consecutive children (<16 years) with newly diagnosed alopecia areata (AA), whose parents/guardians provided written informed consent to participate in the study. Any sign of inflammation (scaling/oozing) or scarring alopecia and/or fungal infection served as exclusion criteria. Alopecia areata was diagnosed clinically in all cases followed by its dermoscopic confirmation. In doubtful cases, 10% KOH mount was done to rule out fungal infections. Requisite approval was taken from the Institutional ethical committee and study was conducted in accordance with the Declaration of Helsinki Principles of medical research.

Each patient was subjected to a detailed medical history using fixed proforma to obtain their demographic details, duration of disease, sites affected, precipitating/aggravating factors, associated disease with special emphasis on atopic or endocrine disorders and detailed family history regarding the presence of AA, atopic disorders or endocrine disorders. Subsequently dermatological examination was done to assess the morphological pattern, extent and severity of hair loss, nail involvement and detect other cutaneous disorders like vitiligo, atopic dermatitis, or infections. Based on previous studies\textsuperscript{[5,12]} we graded the severity as mild (<25% involved), moderate (25–50% involved), severe (51–75% involved), and extensive (>75% involvement). Based on pattern and extent of hair loss, AA was classified as patchy, ophiasis, sisaipho, alopecia totalis, and universalis. General survey, systemic examination and serum biochemistry were conducted to rule out endocrine disorders like thyroid dysfunction, diabetes mellitus, and anemia. Non-polarized dermoscopy was done in all children using a Heine\textsuperscript{®} Mini 3000 LED Dermatoscope (Germany) as no parent/guardian consented to skin biopsy. All the findings have been preserved for future use.

**Statistical analysis**

Data were entered in a Microsoft Excel spread sheet. All entries were double-checked for consistency. All the data obtained have been statistically analyzed using MedCalc\textsuperscript{®}v12.5.0 and preserved for future reference. Mean and standard deviation was used for continuous variables. Normal distribution of numerical variables was determined using the Shapiro-Wilk test. Chi-square test was used for non-parametric data while ANOVA and independent t-test were applied for parametric data. Multivariate regression was used to assess the degree of association between subject parameters and severity of alopecia areata. A “p” value <0.05 has been considered significant.

**Results**

During our study period (1 year) 1,60,784 patients attended our dermatology OPD, 2860 being patients of alopecia areata (AA). Among them, there were 585 children with alopecia areata (<16 years), while there were 60 new cases of childhood alopecia areata. Of these 60 children, 50 fulfilled our inclusion and exclusion criteria and were enrolled in our study. Thus, we recorded a prevalence of 20.5% (585/2860) for pediatric alopecia areata in our set-up.

Among the 50 children with newly diagnosed alopecia areata, mean (SD) age was 11.1 (3.7) years [range 3–16 years]. Girls [29 (58%)] outnumbered boys [21 (42%)], with a male: female ratio of 1:1.4. Most of the children (60%) belonged to 11–16 year age group, while only 6 (12%) children were below 5 years. Most of our patients [30 (60%)] (males: 12, females: 18) presented within 6 months of developing the disease, while the disease persisted for >2 years in 3 (6%) patients [Table 1]. Eleven (22%) patients were from a low socio-economic status, while 46 (92%) children had illiterate parents.

Regarding associated diseases, atopic disorders (atopic dermatitis, bronchial asthma, and allergic rhinitis) were the commonest, present in 24 (48%) children (male: 8, female: 16), while vitiligo and thyroid dysfunction (hypothyroidism >hyperthyroidism) were recorded in 26% and 24% subjects, respectively. Other cutaneous findings included pyoderma (5 patients), scabies, pediculosis, foot-eczema, verruca, dermatophytoses, molluscum contagiosum (2 patients each) and lichen planus, lichen sclerosus et atrophicus, cheilitis and hemangioma (1 patient each), while other systemic co-morbidities included microcytic hypochromic anemia (10,20%) and diabetes mellitus (6,12%). Down’s syndrome was present in 1 patient.

A positive family history of AA was obtained in 5 (10%) [Males: 4, female: 1] patients, but was not statistically significant (p = 0.1, Fisher’s exact test). This included first-degree relatives in 3 patients (60%) while the remaining 2 (40%) children had multiple family members affected. A positive family history of atopy and vitiligo was noted in 30% and 22% of our patients, respectively. Sixteen (32%) children provided...
a positive history of precipitating/aggravating factors including psychological stress in 13 (26%), infection in 2 (4%) [1- urinary tract infection and 1 dental carries] and trauma in 1 (2%). The major causes of stress were school stress, sibling rivalry, hospitalization of family member, and parental conflicts. Eighteen (36%) patients reported self-treatment with indigenous remedies like ayurveda, ginger paste, homeopathic or onion juice before consulting us.

Table 1: Clinico-demographic parameters (n=50)

| Parameters                        | Males (n=21) | Females (n=29) |
|-----------------------------------|--------------|----------------|
| Age distribution (years)          |              |                |
| Range                             | 3-16         | 3-16           |
| Mean (SD)                         | 11.5 (3.6)   | 10.8 (3.8)     |
| Age group                         |              |                |
| ≤5 years                          | 3 (14.3)     | 3 (10.3)       |
| 6-10 years                        | 5 (23.8)     | 9 (31)         |
| ≥11 years                         | 13 (61.9)    | 17 (58.6)      |
| Duration of alopecia areata       |              |                |
| ≤6 months                         | 12 (57.1)    | 18 (62.1)      |
| 6-12 months                       | 6 (28.6)     | 5 (17.2)       |
| 13-24 months                      | 1 (4.8)      | 5 (17.2)       |
| >24 months                        | 2 (9.5)      | 1 (3.4)        |
| Severity/extent of alopecia areata|              |                |
| Mild (<25%)                       | 14 (66.7)    | 18 (62.1)      |
| Moderate (25-50%)                 | 6 (28.6)     | 5 (17.2)       |
| Severe and extensive (≥51%)       | 1 (4.8)      | 6 (20.7)       |
| Sites of alopecia areata          |              |                |
| Scalp                             | 15 (71.4)    | 23 (79.3)      |
| Eyebrow                           | 3 (14.3)     | 0 (0)          |
| Alopecia totalis                  | 0 (0)        | 2 (6.9)        |
| Alopecia universalis              | 0 (0)        | 2 (6.9)        |
| Both scalp and eyebrow            | 3 (14.3)     | 2 (6.9)        |
| Nail involvement                  |              |                |
| Absent                            | 12 (57.1)    | 19 (65.5)      |
| Pitting                           | 4 (19)       | 7 (24.1)       |
| Thinning                          | 2 (9.5)      | 2 (6.9)        |
| Others                            | 3 (14.3)     | 1 (3.4)        |
| Associated diseases               |              |                |
| Atopic disorders                  | 8 (38.1)     | 16 (55.2)      |
| Vitiligo                          | 6 (28.6)     | 5 (17.2)       |
| Thyroid dysfunction               | 6 (28.6)     | 6 (20.7)       |
| Anaemia                           | 9 (42.8)     | 1 (3.4)        |
| Family history                    |              |                |
| Alopecia areata                   | 4 (19)       | 1 (3.4)        |
| Atopic disorders                  | 5 (23.8)     | 10 (34.5)      |
| Vitiligo                          | 4 (19)       | 7 (24.1)       |
| Thyroid dysfunction               | 1 (4.8)      | 1 (3.4)        |

All values expressed in n (%), unless otherwise mentioned

Scalp was the commonest site involved in our study (43, 86%) [p < 0.001, Chi-square]; 76% showing isolated scalp involvement while 10% showed additional eyebrow involvement. The disease was restricted to eyebrows in only 3 (6%) cases, all males. Alopecia totalis (involvement of whole scalp) and alopecia universalis (scalp plus other body sites) [Figure 1] was recorded in 2 (4%) patients each, all females. According to the pattern of involvement, 74% (37/50) had circumscribed patchy involvement [Figures 2 and 3] while ophiasis and sisaipho were noted in 16% and 2% patients, respectively. This difference was statistically significant (p < 0.001, Chi-square). In circumscribed and ophiasis pattern females predominated, while a single male presented with sisaipho pattern. Ophiasis pattern showed a significant association with the severity of disease (p = 0.0008, Fisher’s test).

AA was mild (area of involvement <25%) in most children [32 (64%)] (M: F 14:18) followed by moderate (area involved 25–50%) in 11 (22%) children (M: F 6:5) while 3 (6%) (M: F 1:2) and 4 (8%) children (all females- 2 each of alopecia totalis and universalis) showed severe (51–74% involved) and extensive (≥75%) involvement, respectively. This difference was statistically significant (p = 0.009, Chi-square).
Nail involvement was present in 19 (38%) children (males: 9, females: 10) but not statistically significant (p = 0.6, Fisher’s test). Among them the commonest pathology was pitting (11/19, 57.9%) followed by thinning and other features (21%) each [n = 19]. The later group included leukonychia (n = 1), brownish discoloration (n = 2), and pterygium formation (n = 1) [Table 1].

On correlating disease severity with clinical parameters [Table 2], we observed female gender, atopic disorders, parental illiteracy, low socio-economic status, nail involvement, progression of AA beyond scalp, vitiligo, and thyroid abnormalities (hypo > hyperthyroidism) to be more prevalent in those with moderate/severe/extensive disease (vs. mild disease), however no association was statistically significant (p > 0.05, Fisher’s test). We observed a negative correlation between severity of disease and age of patient suggestive of more severe disease in younger patients; however, it was not statistically significant (p = - 0.07, P = 0.6, Spearman's correlation). Interestingly, history of recurrence, family history of AA and stress were predominant in mild disease, without any statistical significance. Logistic regression model showed none of these factors to be significant predictors of the severity of alopecia areata (p = 0.8).

On dermoscopy, the commonest findings were yellow-dots [YD] (44.88%), short vellus hair [SVH] (38.76%), and black dots [BD] (14.28%) [Figures 4 and 5], while exclamation-mark hair and short broken hair [SBH] were noted in 7 (14%) and 4 (8%) patients, respectively. There was no statistical association between the dermoscopic findings and pattern/severity of alopecia areata in our patients.

**Discussion**

In our study, we recorded a prevalence rate of 20.4% for pediatric alopecia areata, consistent with most Indian studies (24–26%). However, it is higher when compared to previous studies from China (12.8%), Singapore (11.1%), Saudi Arabia (4.2%) and a recent meta-analysis by Lee et al. (1.21–2.58%). The variable sample size and ethnic heterogeneity of patients might have contributed to this difference.

In our study, the mean (SD) age of patients was 11.1 (3.7) years, in agreement with previous studies. However, it is slightly higher than studies performed at Kuwait (6.7 years) and Iran (8.9 years).

We observed a female predilection (M: F 1:1.4); consistent with several authors, while others recorded a male predominance. Thus, childhood AA does not have a definite sexual preponderance. We did not find any significant association between gender and severity of AA, contrary to Wohlmuth-Wieser et al. and Xiao et al. who reported boys to be significantly associated with severe AA, while Tan et al. showed increased severity in girls. In the present study 30 (60%) patients presented within 6 months of disease onset, consistent with previous studies.
We noted associated atopic disorders in 48% patients, while 30% had a family member with atopic disorder. Our finding is in agreement with Aturu et al.\textsuperscript{[12]} who recorded atopic

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
\textbf{Clinical parameters} & \textbf{Extent/severity of alopecia areata} & \textbf{P} \\
\hline
& \textbf{Mild (<25\% extent) (n=32)} & \textbf{Moderate/severe/extensive (n=18)} & \\
\hline
\textbf{Gender} & & & 0.7 \textsuperscript{c} \\
Male & 14 (43.8) & 7 (38.9) & \\
Female & 18 (56.2) & 11 (61.1) & \\
\hline
\textbf{Atopic disorders} & & & 0.08 \textsuperscript{c} \\
Present & 12 (37.5) & 12 (66.7) & \\
Absent & 20 (62.5) & 6 (33.3) & \\
\hline
\textbf{History of recurrent episodes} & & & 0.1 \textsuperscript{c} \\
Present & 5 (15.6) & 0 (0) & \\
Absent & 27 (84.4) & 18 (100) & \\
\hline
\textbf{Family history of alopecia areata} & & & 0.1 \textsuperscript{c} \\
Present & 5 (15.6) & 0 (0) & \\
Absent & 27 (84.4) & 18 (100) & \\
\hline
\textbf{Site of alopecia areata} & & & 0.7 \textsuperscript{c} \\
Only scalp & 25 (78.1) & 13 (72.2) & \\
Sites other than scalp\textsuperscript{d} & 7 (21.9) & 5 (27.8) & \\
\hline
\textbf{Nail involvement} & & & 0.5 \textsuperscript{c} \\
Present\textsuperscript{e} & 11 (34.4) & 8 (44.4) & \\
Absent & 21 (65.6) & 10 (55.6) & \\
\hline
\textbf{Vitiligo} & & & 0.7 \textsuperscript{c} \\
Present & 7 (21.9) & 4 (22.2) & \\
Absent & 25 (78.1) & 14 (77.8) & \\
\hline
\textbf{Thyroid dysfunction} & & & 0.09 \textsuperscript{c} \\
Present & 5 (15.6) & 7 (38.9) & \\
Absent & 27 (84.4) & 11 (61.1) & \\
\hline
\textbf{Precipitating factors (stress, infection, trauma etc.)} & & & 0.5 \textsuperscript{c} \\
Present & 2 (6.25) & 0 (0) & \\
Absent & 30 (93.8) & 18 (100) & \\
\hline
\end{tabular}
\caption{Clinical parameters and severity/extent of alopecia areata (n=50)}
\end{table}

All values presented in n (%) form, P values obtained by Fischer’s exact test; \textsuperscript{c} includes eyebrow, alopecia totalis, alopecia universalis and involvement of multiple sites; \textsuperscript{d} includes pitting, thinning and their combination.
disorders in 44% patients, while it is much higher than studies conducted at Kuwait (24.7%), Chandigarh (17.5%), China (0.88%), and Singapore (0.88%).

Regarding family history of atopy, Aturu et al. recorded a lower (17.94%) and similar (33.2%) prevalence respectively. We noted vitiligo and thyroid dysfunction in 26% and 24% patients respectively, higher than other studies. We failed to find any significant association between associated disorders and severity of AA, consistent with other studies.

Family history of AA was present in 5 (10%) patients, comparable to previous studies, but much lower than an Arab study (51.6%), possibly due to their practice of consanguineous marriages. A positive family history was not related to disease severity, consistent with most authors except Goh et al. Vitiligo was most commonly detected in family members of our patients (22%), while other diabetes and hypertension have been reported in other studies.

Most authors have highlighted psychological stress to precipitate and exacerbate AA in 5–43% patients. In the present study, 26% patients reported psychological stress as a precipitating factor; however, there was no association with severity, consistent with an Iranian study. Prior infection was present in 2 (4%) patients (1 each of UTI and dental carries), comparable to Nanda et al. (4.7%, all tonsillitis) and slightly lower than Aturu et al. (7.7%, all dental carries). However, stress is a subjective phenomenon and more well-designed studies are recommended to address this concern.

Scalp was the commonest site involved in our patients (43, 86%), in agreement with previous studies, ranging from 80 to 100%. Eyebrow was involved in 16%, comparable to Nanda et al. (13%) and Farajzadeh et al. (10%), but much lower than Kavak et al. (2.2%).

Most of our patients (37 (74%)) presented with circumscribed patchy pattern, consistent with previous studies. Ophiasis (16%) was significantly associated with severe disease (p < 0.05); Aturu et al. also reported similar association; however, their prevalence of ophiasis was much low (5.1%). In our cohort, maximum (64%) subjects presented with mild disease (<25% involvement), in agreement with most Asian and Arab studies. We noted extensive involvement (76–100%) alopecia totalis (AT) and alopecia universalis (AU) in 4 (8%) patients (2 patients each), comparable to studies conducted at China (6.2%) and Iran (2.4%) but lower than other studies (17–31%).

Western studies have recorded a much higher incidence of extensive AA (>60%) probably because they deal only with referred cases at tertiary centers, while in India all patients present to us irrespective of severity.

In our cohort, nails were involved in 19 (38%) patients, consistent with the existing literature (8–40%). Parents who enquire about possible precipitating factors and family history, though they are not related to the severity of

Table 3 compares the salient features of different studies concerning childhood alopecia areata.

In the current study, dermoscopy of the alopecic patch revealed yellow dots to be the commonest finding in 44 (88%) cases, followed by short vellus hair and black dots in 76% and 28% cases, respectively. Similar pattern has been reported by Bapu et al. and Mane et al. while Jha et al. and de Moura et al. also noted Yellow-dots to be the commonest finding in 79% and 95% patients, respectively. We observed black dots in only 28% patients, in contrast to Jha et al. (70.8%) and Peter et al. (75%). Although considered classical, we detected exclamation mark hair in 14% patients, comparable to Bapu et al. (20%) and slightly lower than Jha et al. (32%). Bapu et al. detected short broken hair in 13% cases, similar to us (14%), while Jha et al. and Peter et al. reported a much higher presence of this entity (60–70% cases). Several authors have reported a directly proportional relationship between yellow-dot density per field and severity of AA, however, we failed to establish any such association. The higher frequency of yellow-dots and low frequency of black dots or exclamation mark hair in our study are suggestive of less disease activity, which may be explained by more patients in the re-growing phase, thus corroborating the self-limiting nature of childhood alopecia areata.

Limitations

Our major limitations were a small sample size, lack of control group, and a cross-sectional study design. We need future studies with a larger sample size, control group, and longitudinal design, to assess the impact of different clinic-epidemiologic parameters on the prognosis of AA. We were also unable to test for thyroid antibodies to confirm autoimmune thyroiditis due to financial constraints.

Conclusion

To conclude, pediatric alopecia is relatively common in the present set-up; however, most cases are mild showing isolated scalp involvement in the form of localized, circumscribed patches, without any sexual preponderance. Personal history of atopy was detected in 50% of our patients, while one-fourth had associated immunological disorders; this evaluation is critical because they are suggestive of more severe disease. One should also enquire about possible precipitating factors and family history, though they are not related to the severity of
Table 3: Comparison of the salient features of previous studies concerning pediatric alopecia areata

| Name of author, place, year | Prevalence of childhood alopecia areata (%) | Most common age group (years); Gender distribution | Severity of disease | Most common clinical presentation; Most common site | Family history of alopecia areata (%) | History of associated disorder (most common) | Nail involvement (%) |
|-----------------------------|---------------------------------------------|---------------------------------------------------|---------------------|---------------------------------------------------|--------------------------------------|-----------------------------------------------|----------------------|
| Sharma et al.,[13] Chandigarh, India, 1996 | 23.9 | 6-10 years; Female > male (1.4:1) | Severe AA (total, universal or extensive) → 16.9% 80.5% → mild disease, 13% → extensive (>50% scalp affected) | 60%- Single patch; Scalp | 12.4 | 17.5% → atopic disorders | 30 |
| Nanda et al.,[5] Kuwait, 2002 | 6.7 | 2-6 years; Girls>boys (2.5:1) | | | 51.6% | 20% → Atopic disorders | 26.5 |
| Tan et al.,[15] Singapore, 2002 | 11.1 | 11-15 years; Males > females (1.4:1) | 82.4% → limited AA (<50% involvement); AT/AU→2.6% | Localised patch; Scalp | 8.4 | 26.6% → Atopic disorders | 8.4 |
| Xiao et al.,[14] China, 2006 | 12.8 | 11-15 years; Males > females (1.4:1) | 84.9% → limited AA (<50% involvement), 8.9% → 50-99% involvement, AT (3.5%) and AU (2.6%) | Localised patch; Scalp | 11.1 | 2.65% → Associated disorders | - |
| Farajzadeh et al.,[6] Iran, 2016 | - | 6-10 years; Males > females (1.3:1) | 84.1% → patchy AA (localized), AT→2.4%, AU→nil | Localised patch; Scalp | 21 | 14% → Eczema | 10 |
| Wohlmuth-Wieser et al.,[4] USA, 2018 | - | 6-10 years; Females > males (1.5:1) | 37% → lost all scalp hair, 19.4% → upto 75% hair loss, 14.9% → <25% hair loss | Scalp | 26.1 | 32.7% → Atopic dermatitis | 43.8 |
| Atluru et al.,[12] Chennai, India | 26 | 13-18 years; Female > male (1:4:1) | 75% → mild disease (<25% scalp involved), 15.4% → 25-50% hair loss, Opiasis (5.1%), Sisaipho (2.5%), AT (2.5%) | Patchy hair loss; Scalp | 7.7 | 43.6% → Atopic disorders | 38.5 |
| Present study, West Bengal, India | 20.5 | 11-16 years; Female>male (1.4:1) | 64% → mild disease (<25% scalp involved), 22% → 25-50% scalp involved, AT→4%, AU→4% | Patchy hair loss; Scalp | 10 | 48% → Atopic disorders | 38% |

AA- Alopecia areata, USA United States of America, AT alopecia totalis, AU alopecia universalis

disease. Ophiasis pattern and nail involvement must be actively pursued because of their association with severe disease. Dermoscopy is an important non-invasive in-vivo diagnostic tool in this age group, thus dermatologists must be aware of the common dermoscopic findings in this disease. Dearth of similar literature in the present set-up has prompted this study.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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