IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 22, Issue 3 Ser.9 (March. 2023), PP 22-27
www.iosrjournals.org

A Clinical Study of Pediatric Hypomelanotic Dermatoses in a Tertiary Care Centre.

Dr. Shalini Rosy[1], Dr. Shiva Kumar.V[2], Dr. Rachamadugu keerthana[3]
[1](*Post graduate, Department of Dermatology, Venereology and Leprosy, PES Institute of Medical Sciences & Research/YSRUHS, India)*
[2](*Head of the Department, Department of Dermatology, Venereology and Leprosy, PES Institute of Medical Sciences & Research/YSRUHS, India)*
[3](*Post graduate, Department of Dermatology, Venereology and Leprosy, PES Institute of Medical Sciences & Research/YSRUHS, India)*

ABSTRACT:
Background:
Childhood pigmentary dermatoses are one of the most commonly encountered conditions of which hypopigmented are important as they are associated with a significant amount of concern in parents.
Materials and Methods: *This is a descriptive study, conducted from March 2022 to August 2022 at PES Institute of Medical Sciences And Research, Kuppam. 121 patients with hypopigmentation who met the inclusion criteria were included in study.*
Results: *Among 121 patients,67 were girls and 54 were boys,Majority of children belong to age group of 0-5 years(48.76%).Most common site of involvement was face,most common hypomelanotic dermatoses was pityriasis alba.*
Conclusion:*The most common hypomelanotic dermatosis noted in the present study was pityriasis alba and other disorders seen in decreasing order of frequency were primary disorders of hypopigmentation, post inflammatory hypopigmentation, pityriasis versicolor, Hansen's disease and morphea.*
Key words: *Hypopigmentary lesion,pityriasis alba,pityriasis versicolor.*

Date of Submission: 02-03-2023 Date of Acceptance: 14-03-2023

I. INTRODUCTION

- Childhood pigmentary dermatoses are one of the most commonly encountered conditions of which hypopigmented are important as they are associated with a significant amount of concern in parents.3
- Abnormal cutaneous pigmentation can be due to alteration in melanin content, abnormal distribution of melanin, reduced hemoglobin, or deposition of exogenous substances.
- Hypopigmentation is defined as any form of reduced pigmentation whereas depigmentation refers to a near complete absence of pigmentation.
- Disorders of hypopigmentation may be congenital/acquired, localized/diffuse.
- The commonly encountered childhood hypomelanotic disorders are pityriasis alba, vitiligo, pityriasis versicolor and post inflammatory hypopigmentation secondary to certain inflammatory dermatoses.5
- A thorough medical history, clinical examination, interdisciplinary consultation, Wood's lamp, diascopy test, histological examination may aid in the appropriate management of the same.
- Pediatric hypomelanotic dermatoses can be the reason for worry in parents due to the external appearance. These conditions may often pose a diagnostic challenge in treating physicians due to their subtle presentation and the causes can be heterogenous.
- Hence the present study was carried out to study the various hypopigmented dermatoses in childhood.

II. MATERIALS AND METHODS

- The study was conducted on children aged 0 to 18 years presenting with hypopigmented lesions irrespective of sex attending the Outpatient Department of Dermatology at PESIMSR, Kuppam for a period of 6months from March 2022 to August 2022.
- Approval was taken from the Institutional Ethics Committee. Individuals aged more than 18 years, history of topical medicament usage prior to consultation and patients whose parents disagreed to offer consent were excluded from the study.

- Data including patient's name, onset and evolution of lesions, associated skin and systemic complaints and family history were noted.
- Clinical photographs were taken for documentation after obtaining informed/written consent from the parent.
- The basic investigations done to arrive at the appropriate diagnosis were complete hemogram, wood's lamp examination, diascopy test, KOH mount and biopsy only if required.
- Data were analyzed using descriptive statistical analysis

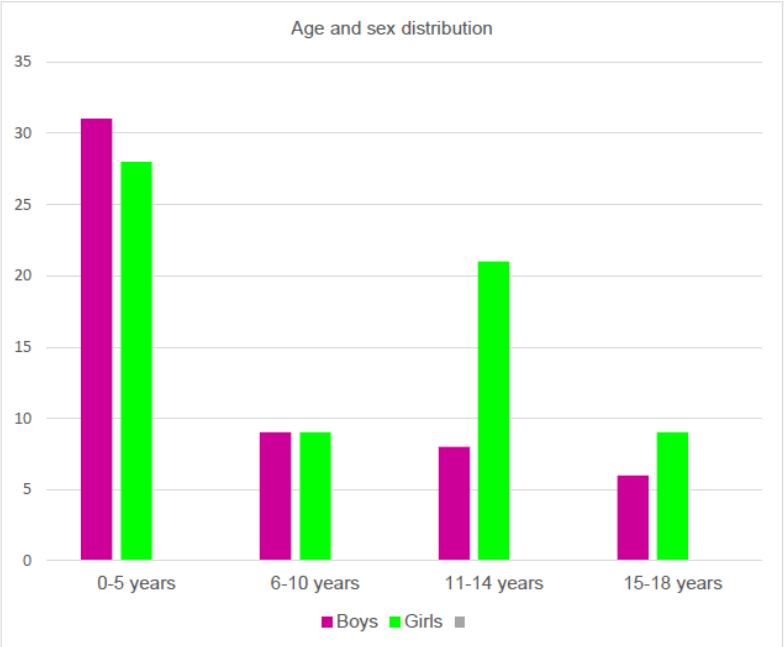
III. RESULTS

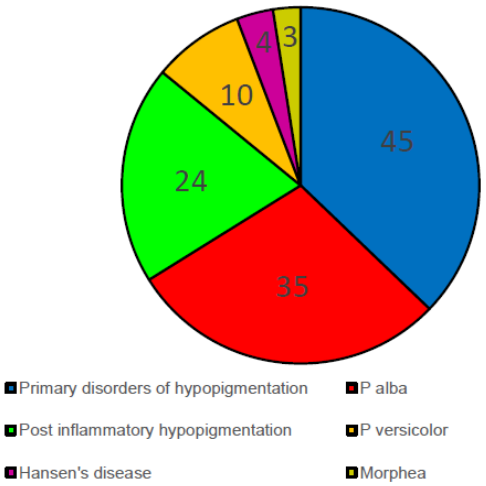
A total of 121 patients with hypopigmented lesions aged 0-18 years were included in the study of which 67(55.37%) were girls and 54(44.62%) were boys.

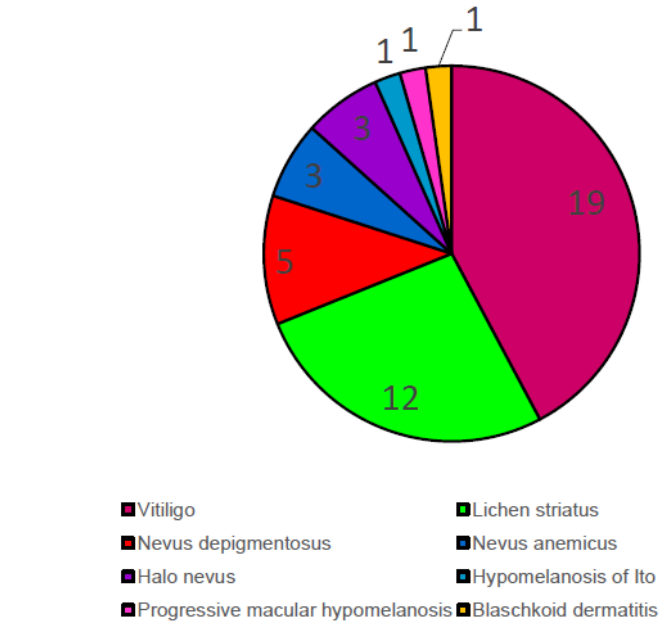
The majority of the children belonged to the age group of 0-5 years (48.76%).

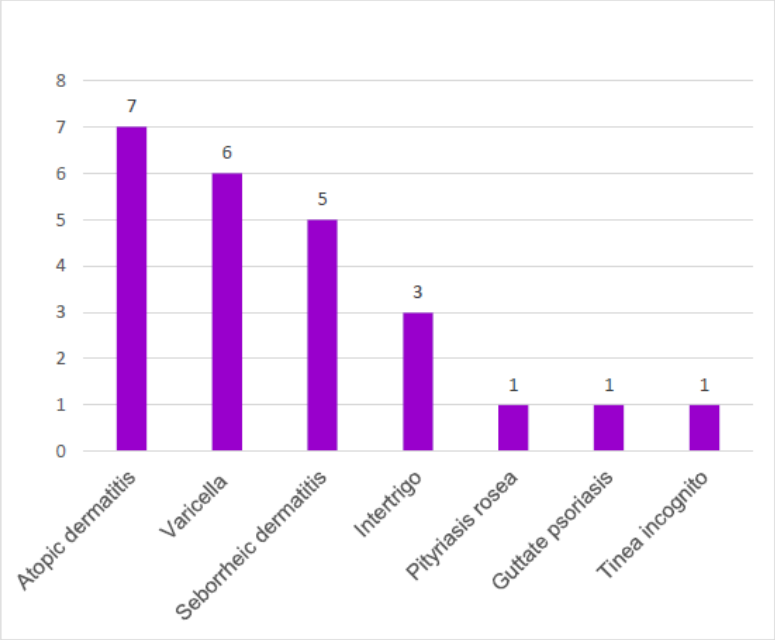
The most common site of involvement was the face (54.54%).

The mean age of onset of symptoms between 0-5 years, 6-10 years, 11-14 years and 15-18 years were 2.38years, 8.42 years, 12.54 years and 16.19 years respectively.





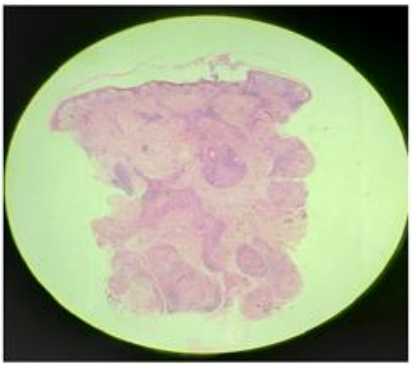




	Pityriasis alba	Vitiligo	Lichen striatus
Boys	15	5	5
Girls	20	14	6
Total	35	19	11
Most common age group affected	0-5 years (22 cases)	11-14 years (8 cases)	0-5 years (6 cases)
Age of onset	2.1-15.75 years	0-5 years : 3 years 6-10 years : 8.4 years 11-14 years : 11.1 years 15-18 years : 15.5 years	6.71 years
Average duration of symptoms	2.5 months	2.47 months	9 months
History of atopy	22 (62.8%)	None	4 (36.36%)
History of preceding infection	5 (14.2%)	None	2 (18.18%)
Anemia	2 (5.7%)	None	None

Hypothyroidism	None	None	None
Most common subtype of vitiligo	-	Non segmental : 14 (73.6%) Segmental : 6 (31.5%)	-
Most common site of involvement	Face (all cases)	Face (8/42.1%) Upper extremities (5/26.31%) Mucosa (3/15.78%) Lower extremities (3/15.78%)	Upper limb 5 (45.45%)

Male : Female ratio	**3:1**
Borderline Tuberculoid Hansen's	2
Tuberculoid Hansen's	2
Mean age of onset	10 years



IV. DISCUSSION

- According to Soni et al the majority of children belonged to the age group of 0–6 years (41%), mean duration was 1.12 years and the common pediatric hypomelanoses was pityriasis alba (27.33%).In our study majority of children belonged to age group of 0-5years(48.76),mean duration was 2.38years.
- Babu et al in their study on 401 children with newly diagnosed vitiligo, observed that 48.9% were females and 51.1% were males, the mean age at the time of presentation was 10.22 years.In our study among 19 vitiligo patients,5 were males and 14 were females,mean age of presentation was 11.1years.
- Jain *et al* conducted a study on 35 children aged <12 years with vitiligo in which the most common site of involvement was face (25.71%) followed by lower limb (20%), the most common pattern seen was vitiligo vulgaris (48.5%).In our study most common site of involvement was face followed by lower limbs.
- In the study conducted by Das et al, 10 patients presented with lichen striatus in which male to female ratio was found to be 1:4, mean age of onset was 4.7 years, upper extremities and trunk being the most common site to be involved, history of atopy in 3 patients.In our study male to female ratio is 5:6,mean age of onset was 6.7 years,most common site of involvement was upper limbs,history of atopy seen in 4 children.

V. CONCLUSION

- The most common hypomelanotic dermatosis noted in the present study was pityriasis alba and other disorders seen in decreasing order of frequency were primary disorders of hypopigmentation, post inflammatory hypopigmentation, pityriasis versicolor, Hansen's disease and morphea.
- These diseases may be the reason for undue concern and anxiety in parents which makes it essential for a thorough evaluation and management of these dermatoses.
- Hence the present study was conducted to evaluate the clinical characteristics of hypopigmented lesions in children attending the outpatient department of PESIMSR, Kuppam.

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Dr. Shalini Rosy, et. al. "A Clinical Study of Pediatric Hypomelanotic Dermatoses in a Tertiary Care Centre." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 22(3), 2023, pp. 22-27.