

Original Research Article

Clinical profile of childhood vitiligo at a tertiary hospital in North Kerala

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ABSTRACT

Background: Vitiligo is an autoimmune disorder characterised by depigmentation of skin and/or mucosa. It is seen in adults as well as children and affects both males and females.

Methods: 40 children under 14 years of age with clinically diagnosed vitiligo were included in this study. The study was conducted in the dermatology outpatient department from March 2017 to February 2018. The various clinical and epidemiological features observed in the patients are described.

Results: The most common age group affected was 5 to 9 years (45%). Vitiligo was more common in girls (55%) and vitiligo vulgaris was the most common clinical type (35%). Extremities were the most common site of onset of the disease (37.5%). Leukotrichia, Koebners phenomenon and a positive family history were seen in a significant number of cases.

Conclusions: Vitiligo is common in children and is associated with significant psychological trauma leading to poor quality of life. Updated knowledge about the various clinical patterns will help in early correct diagnosis and proper treatment.

Keywords: Vitiligo, Childhood, Leukotrichia, Koebners

INTRODUCTION

Vitiligo is an acquired multifactorial disorder characterised by depigmented macules. Vitiligo can develop at any age and shows no gender predilection. Childhood vitiligo contributes to about 25% of total vitiligo cases.¹ Childhood vitiligo differs from adult vitiligo in various clinical and epidemiological aspects. Vitiligo in children can cause severe mental stress and lead to poor quality of life. In this study the prevalence of various clinical patterns of childhood vitiligo and their epidemiological features in patients attending dermatology outpatient department were studied.

METHODS

A prospective study of clinico-epidemiological features in 40 children with vitiligo was done in the dermatology outpatient department of Kannur Medical College, Anjarakandy over a period of 1 year from March 2017 to February 2018 after getting ethical clearance from the institution. Inclusion criteria were all children with clinically diagnosed vitiligo upto 14 years of age who were willing for the study were included. Exclusion criteria were unwilling patients, children above 14 years and patients with other causes of depigmentation were excluded. A detailed history regarding age of onset, initial site of involvement, duration of the disease, family

history and precipitating factors were noted. Dermatological examination was done and sites of involvement, leukotrichia, Koebners phenomenon, type of vitiligo were recorded.

RESULTS

Out of 40 children with vitiligo in the present study, 18 were boys (45%) and 22 were girls (55%) (Table 1). The earliest age of onset was at 8 months of age. The most

common age group involved was 5 to 9 years (45%). A positive family history was recorded in 6 children (15%). The most common site of onset was extremities followed by trunk, head and neck, genitalia and mucosa (Table 2). The most common clinical type was vitiligo vulgaris followed by focal vitiligo (Table 3). Other clinical types seen were acrofacial, segmental and mucosal vitiligo. Halo nevi were noted in 2 cases (5%). Koebners phenomenon and leukotrichia were seen in 8 (20%) and 10 (25%) cases respectively (Table 4).

Table 1: Age and sex distribution.

Age group (in years)	Male	Female	Total	Percentage (%)
0-4	5	3	8	20
5-9	7	11	18	45
10-14	6	8	14	35
Total	18	22	40	100

Table 2: Site of onset distribution.

Site of onset	Male	Female	Total	Percentage (%)
Extremities	7	8	15	37.5
Trunk	5	7	12	30
Head and neck	4	6	10	25
Genitalia	1	1	2	5
Mucosa	1	0	1	2.5

Table 3: Clinical presentation.

Pattern	Male	Female	Total	Percentage (%)
Vitiligo vulgaris	6	8	14	35
Focal	6	6	12	30
Acrofacial	3	5	8	20
Segmental	2	3	5	12.5
Mucosal	1	0	1	2.5

Table 4: Associated features.

Childhood vitiligo	Leukotrichia	Koebner phenomenon	Family history
Number of patients	10	8	6
Percentage (%)	25	20	15

DISCUSSION

Vitiligo is a common disorder of pigmentation characterised by achromic macules on skin and/or mucosa. It has an overall prevalence of 1%. Incidence of vitiligo in India varies from 0.1 to 8.8%.² Depending on the clinical pattern, vitiligo may be classified as vitiligo vulgaris, focal, acrofacial, segmental, mucosal and universal types.

In the present study, vitiligo was more common in girls than boys. The male to female ratio was 1:1.2. This is similar to studies by Manali et al, Puri, Rangaraj.³⁻⁵

The most common age group involved was 5 to 9 years. Manali et al and Beliappa et al have noted maximum number of cases in 6-9 years and 7-12 years age groups respectively.^{3,6}

Vitiligo vulgaris was the most common clinical type in the present study and extremities were the most common site of onset of the disease. This is similar to studies by Rangaraj, Keyur et al, and Lahlou.^{5,7,8}

Positive family history was seen in 15% of cases in this study. Manali et al and Rangaraj have recorded a positive family history in 17.14% and 12.5% of cases respectively.^{3,5}

Leukotrichia was seen in 25% of cases. Similar findings were noted by Puri and Keyur et al.^{4,7}

A positive koebners phenomenon was seen in 20% of cases. Beliappa et al and Kayal et al have noted koebners in 26.7% and 36.7% of cases respectively.^{6,9}

Various treatment options for childhood vitiligo include topical steroids and calcineurin inhibitors, topical puva, oral immunosuppressants and nbuvb phototherapy.

CONCLUSION

Vitiligo in children is not rare and is more common in girls than boys. Vitiligo vulgaris is the most common clinical type and a positive family history is seen in a significant number of cases. Further studies are required to understand the various clinical patterns and psychosocial impact of vitiligo in children.

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