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Original Article

Childhood Vitiligo: A Clinical Study

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ABSTRACT:

Background: Vitiligo is an acquired pathologic entity; children with vitiligo often suffer from anxiety and depression because of their unusual appearance. Hence; we carried out the present investigation to evaluate the clinical profile of childhood vitiligo patients.

Materials & methods: The present investigations included evaluation of the clinical profile of the childhood vitiligo patients. A total 100 subjects were included in the present study. All the patients with clinical diagnosis of clinical vitiligo were included in the present study. Detailed clinical examination of all the patients was carried out by experienced paediatricians. Microsoft excel sheet was used for compiling all the data obtained, which was subsequently assessed with SPSS software. **Results:**Head and neck region followed by limbs and genitalia were the most commonly affected sites in the present study among the childhood vitiligo patients. As far as type of childhood vitiligo was concerned, vitiligo vulgaris followed by segmental and focal vitiligo were the common type of childhood encountered in the present study. **Conclusion:**Childhood vitiligo is a common problem encountered these days. Segmental vitiligo and vitiligo vulgaris are its most common encountered types.

Key words: Childhood Vitiligo, Clinical profile

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INTRODUCTION

Vitiligo is an acquired pathologic entity with a variable course. Clinically, it is characterized as well-defined depigmented macules or patches thought to occur secondary to melanocyte dysfunction and loss.^{1, 2} It is the most common depigmentation disorder, affecting approximately 0.5 to 2.0 percent of the population and has no predilection for gender or race. Half of all cases begin in childhood. In many cases, familial aggregation of the disease is seen and other autoimmune disorders may be associated. Segmental presentation is more common and limited body surface area involvement is usual in this age group. Children with vitiligo often suffer from anxiety and depression because of their unusual appearance.³⁻⁵

A variety of advances occurred in the past two decades that have enhanced the management of childhood vitiligo. Even if today different kind of therapies, both medical and surgical, none of them may be considered as a standard gold treatment for the variable results in term of repigmentation and the risk of side effects.⁶ Under the light of above mentioned data, we carried out

the present investigation to evaluate the clinical profile of childhood vitiligo patients.

MATERIALS & METHODS

The present investigations were conducted in the paediatric department and it included evaluation of the clinical profile of the childhood vitiligo patients.

Ethical approval

Ethical approval was obtained from institutional ethical committee and written consent was taken from all the subjects after detailed description of the research methodology was given to them.

Sample size

100 patients

Methodology

All the patients with clinical diagnosis of clinical vitiligo were included in the present study. Detailed clinical examination of all the patients was carried out by experienced paediatricians. We

didn't included patients with history of any other systemic illness or co-morbidity in the present study. Complete demographic and clinical details along with medical history of all the patients were obtained. Microsoft excel sheet was used for compiling all the data obtained, which was subsequently assessed with SPSS software. Multivariate regression curve were utilized for evaluating the level of significance.

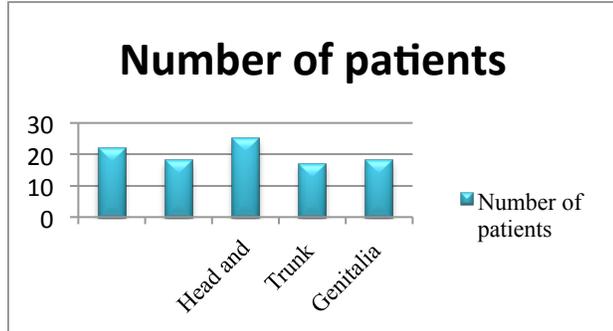
RESULTS

The present study was conducted on 100 childhood vitiligo patients who reported to the department of paediatrics of the medical institute. Mean age of the patients of the present study was 10.5 years. Among these 100 patients, 60 were males, while the remaining 40 were females. Mean weight of the subjects of the present study was 28.5 Kg. Head and neck region followed by limbs and genitalia were the most commonly affected sites in the present study among the childhood vitiligo patients. As far as type of childhood vitiligo was concerned, vitiligo vulgaris followed by segmental and focal vitiligo were the common type of childhood vitiligo encountered in the present study.

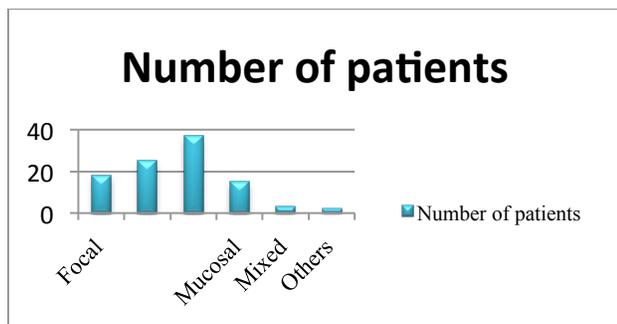
Table 1:Demographic details of the patients

Parameter		Number
Mean age (years)		10.5
Gender	Males	60
	Females	40
Mean weight (Kg)		28.5

Graph 1:Site of onset in subjects with childhood vitiligo



Graph 2:Various pattern of vitiligo



DISCUSSION

Childhood vitiligo contributes to about 25% of total vitiligo cases. 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.⁷⁻⁹In the present study, head and neck region followed by limbs and genitalia were the most commonly affected sites in the present study among the childhood vitiligo patients. As far as type of childhood vitiligo was concerned, vitiligo vulgaris followed by segmental and focal vitiligo were the common type of childhood vitiligo encountered in the present study. Jain M et al evaluated the clinical characteristics of childhood vitiligo (in the age group < 12 years) in the Outpatient Department of Dermatology, Venereology and Leprology, Government medical college, Kota, between July 2012 and June 2013. A total of 35 childhood vitiligo patients were examined. Out of 35 children, 20 patients (57.14%) were female and 15 patients (42.86%) were male. In most of the patients, disease onset was < 10 year of age and mean age of onset was 6.64 ± 1 year. The most common pattern observed in childhood vitiligo was vitiligo vulgaris (17 patients) followed by focal (9 patient). Other less common pattern were segmental (4 patients), mucosal (2 patients), mixed (1 patient), contact (1 patient), acrofacial (1 patient). Out of 35 patients, 6 patients had a family history, 12 patients had Koebner phenomena, and 3 patients had leucotrichia. Other cutaneous dermatoses was found in 4 patients out of which 3 patients had halo nevus and 1 patient had atopic dermatitis. Childhood vitiligo in Hadoti region showed a preponderance in females and most common pattern were vitiligo vulgaris followed by focal vitiligo.¹⁰ Raju BP et al evaluated the ocular findings, various clinical characteristics and associated cutaneous abnormalities of childhood vitiligo. They retrospectively analyzed the clinical data of children with vitiligo who presented to the Dermatology Outpatient Department from August 2011 to August 2014. All patients were assessed for the natural history, clinical characteristics, family history, and associated ocular and cutaneous abnormalities. Of the total 180 children with vitiligo studied, 64 (35.6%) were boys and 116 (64.4%) were girls. The mean current age of the children visiting our hospital was 8 years. History of trauma prior to the onset of vitiligo was present in 13 patients (7.2%). The family history of vitiligo was present in 37 patients (20.6%). Most common clinical type of vitiligo seen in our patients was vitiligo vulgaris (n = 68, 37.8%), followed by segmental (n = 41, 22.8%). The most common site of initial lesion was head and neck followed by lower limbs. Leukotrichia was seen in 65 patients (36.1%), while Koebner phenomenon was observed in 48 children (26.7%). Vitiligo disease activity (VIDA) score of +4 was most commonly seen in 108 patients (60%), followed by +3 seen in 20 patients (11.1%). VIDA score 0 and -1 were seen in 15 (8.3%) and 22 (12.2%) patients, respectively. Cutaneous associations with vitiligo were found in 24 patients (13.3%). These were halo nevi in nine patients (5%), atopic dermatitis in six patients (3.3%), alopecia areata in four patients (2.2%), premature canities in three patients (1.7%), and nevus depigmentosus and lichen nitidus in one patient each (0.6%). Thirty-eight patients (21.1%) were found to have periocular depigmentation. Depigmented spots in the iris were seen in two patients (1.1%). Other findings were lamellar cataract and persistent papillary membrane in one patient each (0.6%). Childhood vitiligo in our study showed preponderance in females. Majority of patients (77.9%) had <5% body surface area involvement. Limited number of patients with ocular findings in comparison with adult population might suggest that childhood vitiligo patients do not have ocular pigmentary abnormalities in the beginning, but as they age or as the disease progresses they may develop ocular pigmentary changes.¹¹

CONCLUSION

Childhood vitiligo is a common problem encountered these days. Segmental vitiligo and vitiligo vulgaris are its most common encountered types. A paediatrician should be aware of the complete clinical profile of the disease so that prompt treatment could be started.

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