

CLINICAL PATTERN OF VITILIGO IN PATIENTS ATTENDING DERMATOLOGY OUTPATIENT DEPARTMENT AT A TERTIARY CARE HOSPITAL IN UTTARAKHAND- A RETROSPECTIVE STUDY

Samarjit Roy¹, Rashmi Jinda², Nancy Bhardwaj³, Prateek Nagrani⁴

¹Professor, Department of Dermatology, Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, Dehradun.

²Associate Professor, Department of Dermatology, Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, Dehradun.

³Postgraduate Student, Department of Dermatology, Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, Dehradun.

⁴Postgraduate Student, Department of Dermatology, Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, Dehradun.

ABSTRACT

BACKGROUND

Vitiligo is a common pigmentary disorder of the skin with a worldwide incidence of 1%. The incidence of vitiligo is found to be 0.25-2.5% in India.

Aim- The aim of the study is to determine the clinical patterns of vitiligo in patients attending dermatology outpatient department at a tertiary care centre in Uttarakhand.

MATERIALS AND METHODS

This was a retrospective study where a total of 397 patients of vitiligo attending Dermatology Outpatient Department, Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, Uttarakhand, over a period from October 2015 to September 2016 were included. Diagnosis was made on clinical grounds and relevant investigations.

RESULTS

Out of 397 patients, 52.1% were males and 47.9% were females. Males outnumbered females in our study. Majority of patients belonged to the age group between 21 and 30 years (20.7%). Vitiligo vulgaris (66.2%) was the most common morphological type. This was followed by focal (15.4%), acrofacial (6.8%), mucosal (5.3%), universal (3.3%) and segmental (3%). 19 (4.8%) patients had associated diseases also.

CONCLUSION

Vitiligo was common in younger age group in our study and further studies should be conducted to know various patterns of vitiligo in different regions.

KEYWORDS

Clinical Pattern, Vitiligo, Uttarakhand.

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BACKGROUND

Vitiligo is a common pigmentary disorder of the skin with a worldwide incidence of 1%.¹ Vitiligo is an acquired depigmentary condition caused by inactivation or destruction of melanocytes in epidermis and hair follicle.² The incidence of vitiligo is found to be 0.25-2.5% in India. Gujarat and Rajasthan states have highest prevalence of

8.8%.³ Widespread prejudices, ignorance, taboos, lack of scientific appraisal and confusion of vitiligo with leprosy all make it a social embarrassment for the patients.⁴ The present study was undertaken to know the various clinical patterns of vitiligo in Uttarakhand.

MATERIALS AND METHODS

This retrospective study was conducted in the Department of Dermatology, Venereology and Leprosy of Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, Dehradun, which is a tertiary care hospital situated in sub-Himalayan region of Uttarakhand. In this study, all clinically diagnosed cases of vitiligo, irrespective of age and sex, presenting to Dermatology Outpatient Department between the periods of October 2015 to September 2016 were included. Diagnosis was made on the basis of detailed history and clinical examination. According

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Corresponding Author:

Dr. Samarjit Roy,

Professor, Department of Dermatology,

Himalayan Institute of Medical Sciences,

Swami Rama Himalayan University, Dehradun.

E-mail: roy.samarjit@rediffmail.com

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to the area of body part involvement, patients were classified into vitiligo vulgaris, acrofacial, segmental, mucosal and universal types. Routine investigations and others were carried out as and when required. Specific emphasis was given on sociodemographic profile, patterns of vitiligo and other disease associations. Ethical clearance was taken from ethical committee of the institute. Results were tabulated after observing various clinical patterns of vitiligo.

RESULTS

Total number of patients seen in Dermatology Outpatient Department during our study period of 1 year was 23,019. Out of these, 397 clinically diagnosed patients of vitiligo were included in the study comprising 1.7% of total cases. There were 207 (52.1%) males and 190 (47.9%) females. The age and sex distribution is given in table 1. Majority of the patients belonged to the age group between 21-30 years comprising 82 (20.7%) patients and 11-20 years comprising 80 (20.1%) patients, respectively. Commonest morphological pattern observed in our study was vitiligo vulgaris comprising 263 (66.2%) patients followed by other patterns, e.g. focal vitiligo in 61 (15.4%) patients, acrofacial in 27 (6.8%) patients, mucosal in 21 (5.3%) patients, universal in 13 (3.3%) patients and segmental in 12 (3%) patients (Table 2). 19 (4.8%) patients were having other cutaneous and systemic disease associations. Diabetes mellitus was found in 7 (1.8%) patients, hypertension in 3 (0.8%) patients, thyroid disease in 3 (0.8%) patients and neurofibromatosis in 1 (0.3%) patient. The associated cutaneous diseases noted in our study were canities in 3 (0.8%) patients and alopecia areata in 2 (0.5%) patients (Table 3).

Age (Years)	Male (%)	Female (%)	Total (%)
0-10	31 (7.8%)	23 (5.8%)	54 (13.6%)
11-20	26 (6.5%)	54 (13.6%)	80 (20.1%)
21-30	50 (12.6%)	32 (8.1%)	82 (20.7%)
31-40	28 (7.1%)	19 (4.8%)	47 (11.8%)
41-50	29 (7.3%)	26 (6.6%)	55 (13.9%)
51-60	24 (6%)	20 (5%)	44 (11.1%)
Above 60	19 (4.8%)	16 (4%)	35 (8.8%)
Total	207 (52.1%)	190 (47.9%)	397 (100%)

Table 1. Age and Sex Distribution

Clinical Pattern	Pattern of Vitiligo	
	Number of Patients	Percentage
Vitiligo vulgaris	263	66.2%
Focal	61	15.4%
Acrofacial	27	6.8%
Mucosal	21	5.3%
Universal	13	3.3%
Segmental	12	3%
Total	397	100%

Table 2. Patterns of Vitiligo

Pattern of Vitiligo	Associated Diseases	
	Number of Patients	Disease
Vitiligo vulgaris	11 (2.8%)	Diabetes- 5 (1.3%) Canities- 2 (0.5%) Hypertension- 2 (0.5%) Thyroid disease- 1 (0.3%) Alopecia areata- 1 (0.3%)
Focal	0	
Acrofacial	1 (0.3%)	Alopecia areata- 1 (0.3%)
Mucosal	2 (0.5%)	Diabetes- 2 (0.5%)
Segmental	1 (0.3%)	Neurofibromatosis- 1 (0.3%)
Universal	4 (1%)	Thyroid disease- 2 (0.5%) Canities- 1 (0.3%) Hypertension- 1 (0.3%)
Total	19 (4.8%)	Diabetes- 7 (1.8%) Canities- 3 (0.8%) Hypertension- 3 (0.8%) Thyroid disease- 3 (0.8%) Alopecia areata- 2 (0.5%) Neurofibromatosis- 1 (0.3%)

Table 3. Pattern of Vitiligo with Associated Diseases

DISCUSSION

The aetiology of vitiligo is still an enigma though various theories of origin; e.g. genetic, toxic, neurogenic and autoimmune have been proposed by different workers.⁵ The prevalence of vitiligo is high in India varying in range between 0.46-8.8%. The different ethnic backgrounds of population residing in different geographic regions with different environmental conditions may contribute to the wide variation in prevalence of vitiligo in India.⁶

Males constituting 207 (52.1%) patients outnumbered females constituting 190 (47.9%) in our study, which was similar to Khaitan et al.⁷ Most of other reports show that males and females were affected with almost equal frequency³ and a few studies show slightly higher prevalence in female population.^{4,6}

In our study, majority of patients belonged to the age group between 21-30 years (20.7%) and 11-20 years (20.1%), respectively. Vitiligo occurs most commonly in the third and second decade of life as observed by Arvind HC et al in their study.²

Majority (74%) of patients had progressive vitiligo at the time of presentation. Vitiligo vulgaris (66.2%) was the most common type observed in our study followed by focal,

acrofacial, mucosal, universal and segmental. Shah H et al and Arvind HC et al also observed vitiligo vulgaris as one of the most common type in India. The frequency of distribution of clinical types of vitiligo varies in different studies.^{2,6} No significant difference was found between urban and rural residents in our study similar to as observed by Lu Fao in China.⁸

Vitiligo is associated with many systemic as well as cutaneous disorders. Diabetes mellitus was most common in our study comprising 7 (1.8%) patients similar to 1.7% as observed by Arvind HC et al.² Other reported values were 1.18-2%.^{3,7} Hypertension was found in 3 (0.8%) patients and thyroid disease was seen in 3 (0.8%) patients in our study comparable to 1.7% and 0.7% respectively as observed by Arvind HC et al in their study.² The association of vitiligo with thyroid disease was reported to be much higher (12%) by Gopal et al.⁹

Our study also recorded 3 (0.8%) patients of canities, 2 (0.5%) patients of alopecia areata and 1 (0.3%) patient of neurofibromatosis. Whereas, Aamir H et al recorded 2.17% patients of canities and 1.3% patients of alopecia areata in their study.¹⁰ Associated diseases were more common in patients with vitiligo vulgaris in our study (Table 3).

CONCLUSION

Vitiligo was common in younger age group in our study with a male preponderance. This study also highlights the pattern of vitiligo and other disease association in a tertiary care centre in Uttarakhand, North India, knowledge of which can help to carry out further such studies.

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