



CLINICO-EPIDEMIOLOGICAL PROFILE OF ADULT PATIENTS WITH VITILIGO: AN OBSERVATIONAL STUDY FROM A TERTIARY CARE HOSPITAL

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ABSTRACT

Introduction: Vitiligo is a common depigmenting disorder presenting as amelanotic macules surrounded by normal skin. The majority of cases become apparent between the second to third decade of life. The clinical course is variational. It is broadly classified into Non-Segmental, Segmental and Undetermined/Unclassified. **Methods:** Sixty clinically diagnosed cases of vitiligo were included in the study. Demographic and clinical data of the patients were collected using a pre-structured data collection form. Appropriate statistical tests were applied. **Results:** The majority of patients were in the age group of 21-30 years. The average age of participants was 33.83 with a Female: Male ratio of 1:1.22. Positive family history of vitiligo was recorded in 11 (18.33%) cases. The most prevalent clinical form of vitiligo was vulgaris (51.67%) followed by the focal type. Leukotrichia was observed in 16 patients (26.67%) and Koebner's phenomenon in 11 patients (18.33%). Associations with many systemic diseases like thyroid disorder, alopecia areata, and diabetes were seen. **Conclusion:** In our study, vitiligo vulgaris is the most common type of vitiligo. A high occurrence of comorbidities like thyroid disorder and diabetes mellitus was observed.

KEYWORDS : Vitiligo, Vitiligo Vulgaris, Leukotrichia, Koebner's phenomenon

INTRODUCTION

Vitiligo is a common depigmenting disorder of the skin which is characterized by the selective loss of melanocytes, leading to pigment dilution in the affected areas⁽¹⁾. It affects about 0.5–2% of the world's population⁽¹⁾. In India, the prevalence rate is estimated between 0.25%-4%⁽²⁾.

It may occur in any age group, but most cases become apparent between the second to third decade of life⁽³⁾. It affects both genders equally but female preponderance is reported in a few studies. The most common presentation of vitiligo is totally amelanotic (milky or chalk-white) macules surrounded by normal skin. (Figure 1)

The etiology of vitiligo is largely unknown. Autoimmunity, oxidative stress and genetic predisposition are some common hypotheses found in the literature. Vitiligo has been reported in association with several endocrinopathies and other disorders of autoimmune nature. The clinical course of vitiligo is variational and lesions may remain stable or progress slowly for years.

Vitiligo can be broadly classified into Non-segmental vitiligo, Segmental vitiligo, and Undetermined/ unclassified vitiligo. According to Vitiligo Global Issue Consensus Conference, the term 'Vitiligo' can be used as an umbrella term for all forms of Non-segmental vitiligo and Segmental vitiligo is classified separately⁽⁴⁾



Figure 1: 24Y/F patient with Vitiligo Vulgaris

RATIONALE

In addition to its cosmetic disability, vitiligo also has immense socio-psychological ramifications. Clinico-epidemiological features of vitiligo vary in different parts of the country having varied geo-climatic conditions, and rural and semi-urban communities of diverse ethnic backgrounds and living styles and the spectrum of the clinical profile has not been adequately studied in the north-central part of India.

AIMS AND OBJECTIVES

The aim of the study was to investigate the clinico-epidemiological profile of adult patients with vitiligo in western Uttar Pradesh and the objectives were to assess various clinical patterns and to determine the prevalence of associated comorbidities.

METHODOLOGY

60 patients diagnosed as having vitiligo through clinical examination and giving informed consent were included in the study. After taking a detailed clinical history, a thorough cutaneous examination was done to determine the site and size of the lesion. Hair and mucosal involvement were also noted. Demographic and clinical data of the patients were collected using a pre-structured data collection form and digital photographic record was maintained. Appropriate statistical tests were applied to the data obtained.

RESULTS

The Male to Female ratio in our study was ratio of 1.22:1. Of 60 cases with vitiligo, the majority of patients were in the age group of 21-30 years. The average age of participants was 33.83 and a positive family history of vitiligo was recorded in 11 (18.33%) cases. Leukotrichia was observed in 16 patients (26.67%) and Koebner's phenomenon in 11 patients (18.33%). Extremities was the commonly involved site in majority (65%) followed by the Face (34 Patients, 56.7%).

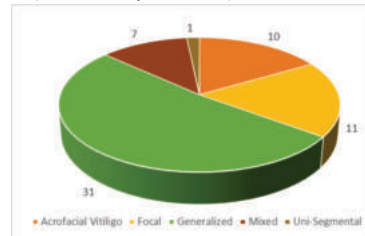


Figure 2: Distribution according to type of vitiligo

Vitiligo Vulgaris (51.67%) was the most prevalent clinical form followed by the focal type (18.3%). (Figure 2). The most commonly associated comorbidity was found to be Diabetes Mellitus (26.7%). Other associated conditions were Hypertension (15%), Hyper/Hypothyroidism (10%), Hyperlipidaemia (3.3%) and Alopecia areata (3.3%). (Table 1).

TABLE – 1 Associated comorbidities in patients with vitiligo

Comorbidities	Number of patients	Percentage
Diabetes Mellitus	16	26.7
Hypertension	9	15.0
Hyperlipidaemia	2	3.3
Alopecia Areata	2	3.3
Hyperthyroidism	1	1.7
Hypothyroidism	5	8.3
Psoriasis	1	1.7
SLE	1	1.7

DISCUSSION

The female to male ratio in our study was 1:1.22. However, studies conducted by Sharma et al. (5), Mahajan et al. (2) and Sapam et al. (6)

reported a slightly higher prevalence in the female population. The majority of patients in the current study were below 30 years and the mean age of onset was 2nd decade of life which was in accordance with the study conducted by Choudhary et al(7) and Mahajan et al(2). This shows that the disease starts at a younger age in the Indian population.

In the present study, 18.33 % of patients had a positive family history of vitiligo. Familial occurrence has been reported to vary from 5 to 30% in different studies. Koebner phenomenon was observed in 18.33% of patients and Leukotrichia in 26.67% of patients. Choudhary et al(7) observed Koebnerisation in 18.1% of patients and Leukotrichia in 25.71% of patients while Sapam et al. (6) reported Koebnerisation in 21.9% of patients and Leukotrichia in 38.5% of patients. Vitiligo vulgaris (51.67%) was most common type observed in our study followed by focal type. This correlates with the findings reported by Sharma et al. (5) and Mahajan et al. (2)

Associations with many other systemic diseases like thyroid disorder, alopecia areata, and diabetes was present.

CONCLUSION

Vitiligo appears to secularly affect both genders and all age groups irrespective of different geo-environmental, living conditions and lifestyles. It has an onset in early adulthood between the ages of 10 and 30 years. Female preponderance in few studies may be attributed to their health-seeking behavior for cosmetic concerns and matrimonial anxiety. Vitiligo vulgaris and focal vitiligo remain the most common forms. Screening of patients for concurrent diabetes, hypertension and thyroid disorders needs to be emphasized.

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