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Original Research

Evaluation of cases of vitiligo- A clinical study

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ABSTRACT:

Background: Vitiligo refers to an acquired, idiopathic, and common de-pigmentation disorder of the skin. The clinically characteristic symptoms of the vitiligo are pale or milk-white macules or patches due to the selective destruction of melanocytes. The present study was conducted to assess cases of vitiligo in both genders. **Materials & Methods:** 104 patients of vitiligo of both genders were included. Type of vitiligo was evaluated. The extent of body surface area involvement was measured by Wallace rule of nine and various clinical patterns were classified according to Vitiligo Global Issues Consensus Conference 2011–12 report. **Results:** Out of 104 patients, males were 64 and females were 40. Common type of vitiligo was segmental seen in 30, non- segmental in 52 and undetermined in 22 cases. Body surface area (%) <1 was seen in 42, 1-10 in 40, 10-50 in 10, 50-80 in 6 and >80 in 4 patients. The difference was significant (P< 0.05). **Conclusion:** Authors found that case of vitiligo is not uncommon nowadays. Common type reported was segmental, non- segmental and undetermined.

Key words: Macules, Segmental, Vitiligo

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INTRODUCTION

Vitiligo refers to an acquired, idiopathic, and common de-pigmentation disorder of the skin. The clinically characteristic symptoms of the vitiligo are pale or milk-white macules or patches due to the selective destruction of melanocytes. They occur on the skin in different parts of the body and sometimes also on the mucous membranes.[1] The clinically characteristic symptoms of the vitiligo are pale or milk-white macules or patches due to the selective destruction of melanocytes.[2] They occur on the skin in different parts of the body and sometimes also on the mucous membranes. The exact pathogenesis of vitiligo is still to be elucidated. Multiple mechanisms, including metabolic abnormalities, oxidative stress, generation of inflammatory mediators, cell detachment and autoimmune responses, might contribute to the pathogenesis. In particular, the autoimmune mechanism is now clearly established. Vitiligo may appear at any age and affect both sexes. It tends to occur or recur in spring and/or summer.[3]

Non-segmental vitiligo (NSV) is a group that comprises acrofacial, mucosal, generalized or common, universal, and mixed forms besides rare forms. Acrofacial form can affect, face, head, hands and feet, and preferably involve the perioral region and the extremities of digits; Mucosal form affects the oral and genital mucosae.[4] Universal is the form that affects the largest extent of tegument (80-90% of body surface), and it is the most common form in adulthood. The generalized or common form usually precedes it.[5] Mixed is the concomitant involvement of segmental and non-segmental vitiligo. Most often, the segmental form precedes NSV. Rare forms: vitiligo punctata, minor and follicular. These types were also considered unclassifiable. Segmental Vitiligo: it can affect one, two or multiple segments.[6] The present study was conducted to assess cases of vitiligo in both genders.

MATERIALS & METHODS

The present study was conducted among 104 patients of vitiligo of both genders in the department of Dermatology. All patients were made aware of the study and their written consent was obtained.

General information such as name, age, gender etc. was recorded. In all subjects, a careful clinical examination was done. Clinically ambiguous cases and lesions not accentuating under Woods' light were excluded. Type of vitiligo was evaluated. Patients were also evaluated for presence of other cutaneous and systemic disorders. The extent of body surface area involvement was measured by Wallace rule of nine and various clinical patterns were classified according to Vitiligo Global Issues Consensus Conference 2011–12 report. Results thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 104		
Gender	**Males**	**Females**
Number	64	40

Table I shows that out of 104 patients, males were 64 and females were 40.

Graph I Distribution of patients

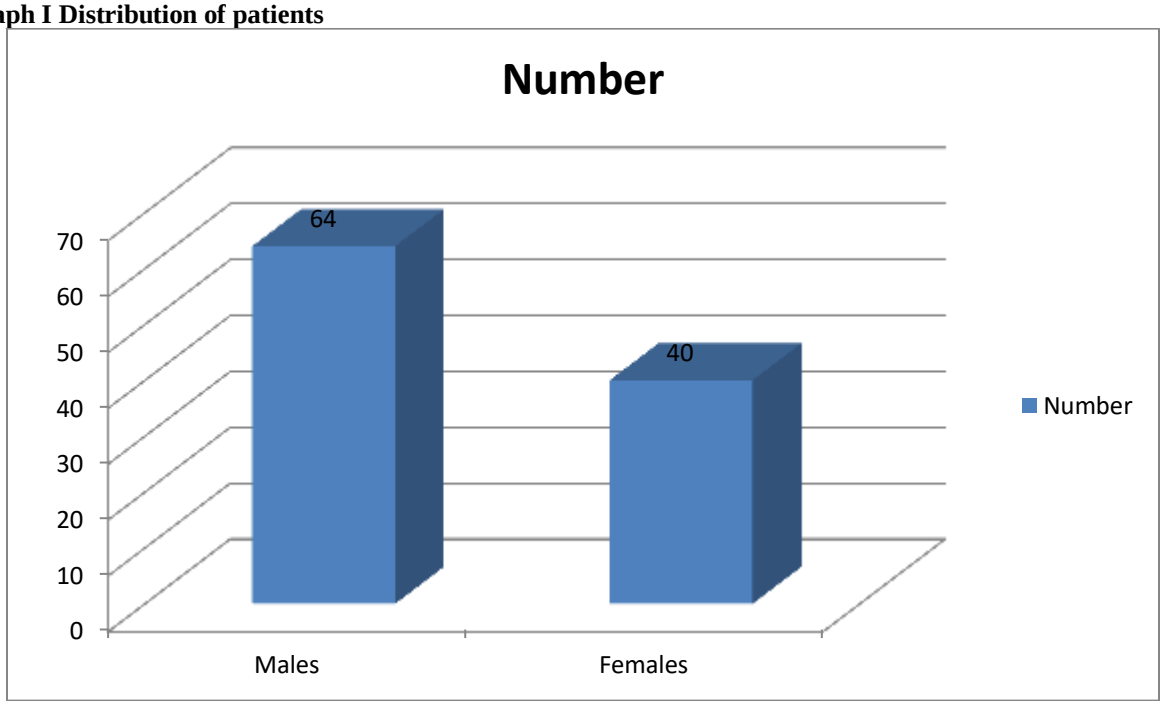

Table II Types of Vitiligo

Types	Number	P value
Segmental	30	0.01
Non- segmental	52	
Undetermined	22	

Table II, graph I shows that common type of vitiligo was segmental seen in 30, non- segmental in 52 and undetermined in 22 cases. The difference was significant (P< 0.05).

Graph II Types of Vitiligo

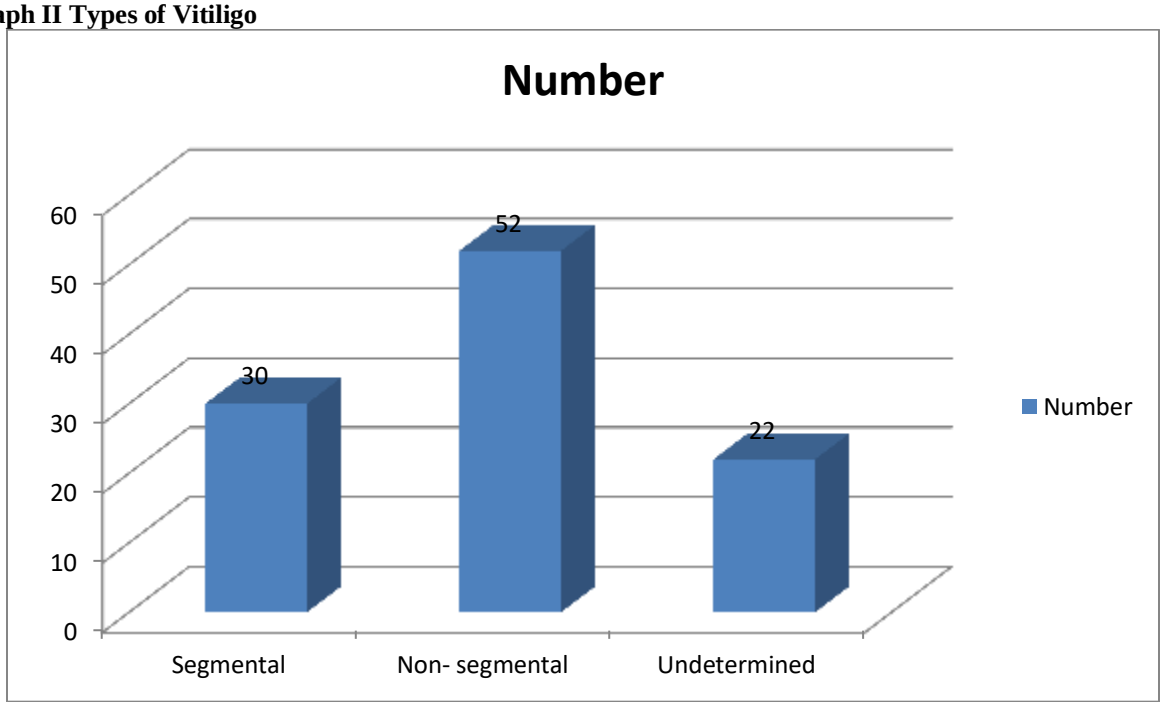

Table III Extent of body surface involvement

Body surface area (%)	Number	P value
<1	42	0.001
1-10	40	
10-50	12	
50-80	6	
>80	4	

Table III shows that body surface area (%) <1 was seen in 42, 1-10 in 40, 10-50 in 12, 50-80 in 6 and >80 in 4 patients. The difference was significant (P< 0.05).

DISCUSSION

Clinically, the usual age of onset is before 20 years of age in nearly half of the cases. It affects both genders equally at any age but most studies report a peak incidence between 18 and 21 years (mean 24 years).[7] Few studies reporting women being affected almost two times more often than men is attributed to their health seeking behavior for cosmetic concerns as vitiligo can be comparatively more stigmatizing and psychosocially devastating for them.[8] However, in children, vitiligo shows a female preponderance, a higher proportion of segmental presentation than acrofacial and mucosal vitiligo, and association with other autoimmune or endocrine disorders being uncommon.[9] The present study was conducted to assess cases of vitiligo in both genders.

In present study, out of 104 patients, males were 64 and females were 40. Mahajan et al[10] found that there were 449 men and 496 women (m:f 1:1.1) aged between 2 and 83 years (mean 24.4 years) and having vitiligo for 1 week to 64 years (mean 5.1 years). The majority, 478 (50.6%) patients were aged ≤20 years and 248 (26.2%) were children aged ≤12 years. The age at the onset was between 6 months and 82 years (mean 20.5 years), and the majority 674 (71.3%) patients had it before 25 years of age. The consultation time was within 5 years in 692 (73.2%) patients. A family history of vitiligo was present in 150 (15.9%) patients. The majority 871 (92.2%) patients had involvement of up to 10% body surface area and vitiligo vulgaris in 562 (59.5%) and focal vitiligo in 117 (18.7%) patients were the most common clinical types. An association with other systemic disorders was in 124 (13.1%) patients and predominately included thyroid abnormalities and diabetes mellitus. Observations are essentially consistent with the literature. There was no difference in clinico-epidemiological features of vitiligo. Patients with an affected first-degree family member had early onset, but difference was not statistically significant. Screening for concurrent thyroid disorders appears important.

We observed that common type of vitiligo was segmental seen in 30, non- segmental in 52 and undetermined in 22 cases. Body surface area (%) <1

was seen in 42, 1-10 in 40, 10-50 in 12, 50-80 in 6 and >80 in 4 patients. Zhang et al[11] in their study, a total of 103 studies were eligible for inclusion. The pooled prevalence of vitiligo from 82 population- or community-based studies was 0.2% and from 22 hospital-based studies was 1.8%. A relatively high prevalence of vitiligo was found in Africa area and in female patients. For population- or community-based studies, the prevalence has maintained at a low level in recent 20 years and it has increased with age gradually. For hospital-based studies, the prevalence has showed a decreased trend from 60s till now or from young to old. No significant publication bias existed in hospital-based studies while a significant publication bias existed in population- or community-based studies.

Das et al[12] in their study two hundred and eleven patients were evaluated. The mean age at onset was 19.07+13.51 (+SD) years. Acrofacial vitiligo was the commonest type of vitiligo. Duration of disease more than 2 years, presence of Koebner's Phenomenon, Family history, Symmetry of lesions, milky white colour of lesion, presence of Leucotrichia, mucosal involvement and Acrofacial type vitiligo had statistically significant.

CONCLUSION

Authors found that case of vitiligo was segmental, non-segmental and undetermined. Most of the patients had 1-10% body surface area involvement.

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