ORIGINAL RESEARCH

Assessment 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. **Materials & Methods:** The present study was conducted on 138 patients of vitiligo of both genders. In all subjects, a careful clinical examination was done. Type of vitiligo was evaluated. **Results:** Out of 138 patients, males were 78 and females were 60. Common type of vitiligo was segmental seen in 36, non-segmental in 58 and undetermined in 24. 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: Segmental, Undetermined, Vitiligo.

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This article may be cited as: Saran J, Dev N. Assessment of cases of vitiligo- A clinical study. J Adv Med Dent Scie Res 2017;5(1):169-171.

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]

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.[2] Furthermore, areas of mucosa may also be affected in patients with acrofacial, common, or universal forms; when it involves only one mucosal site it is classified as indeterminate; in generalized or common form, macules / patches are often symmetrical; it can affect any part of the tegument, mainly hands, fingers, face and trauma-exposed areas. 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. 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.[3]

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.[4] The present study was conducted to assess cases of vitiligo.

MATERIALS & METHODS

The present study was conducted in the department of Dermatology. It comprised of 138 patients of vitiligo of both genders. All were informed regarding the study. Ethical approval was obtained from institute prior to the study.

General information such as name, age, gender etc. was recorded. In all subjects, a careful clinical examination was done. Type of vitiligo was evaluated. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 138		
Gender	**Males**	**Females**
Number	78	60

Table I shows that out of 138 patients, males were 78 and females were 60.

Graph I Distribution of patients

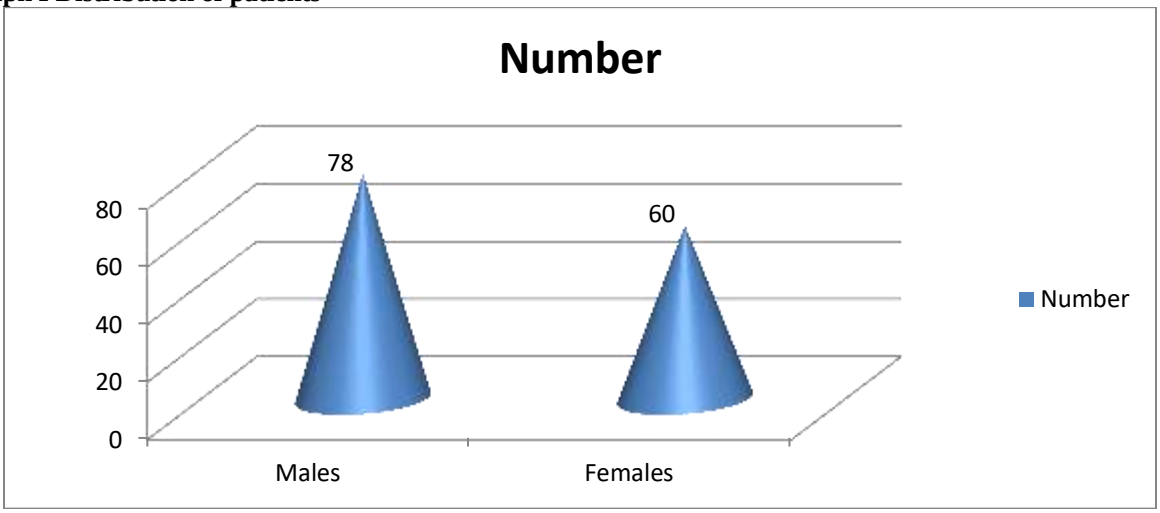
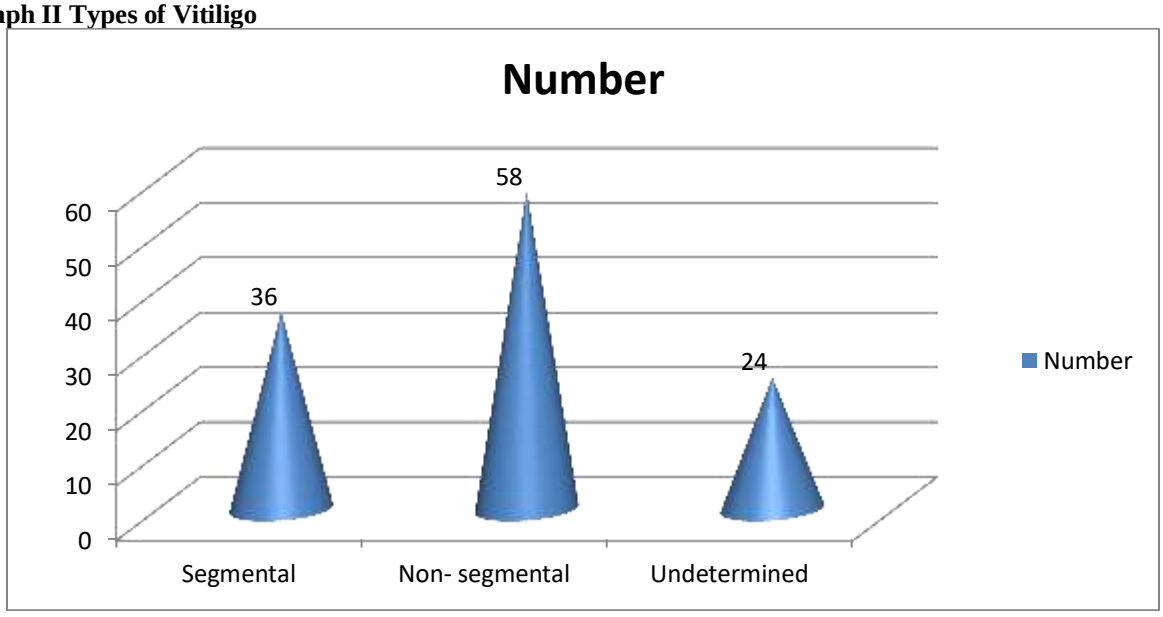


Table II Types of Vitiligo

Types	Number	P value
Segmental	36	0.02
Non- segmental	58	
Undetermined	24	

Table II, graph I shows that common type of vitiligo was segmental seen in 36, non- segmental in 58 and undetermined in 24. The difference was significant (P< 0.05).

Graph II Types of Vitiligo



DISCUSSION

Some previous reports on vitiligo epidemiology were based on population surveys, while others were performed in patients of dermatology clinics.[5] However, the prevalence of vitiligo varies in different geographic regions and different sample size, and the data have limitations and localizations. Besides, the disorder afflicts various ethnic populations with varying prevalence estimates ranging from 0.1% to 2.0% based on the general populations in previous studies. But recently, some papers suggested that previous epidemiological data were exaggerated.[6] Etiology is unknown and the several pathogenetic hypotheses do not account for the entire spectrum of the disease. A positive family history for vitiligo is reported. Actually, family clustering of cases is not uncommon, since about 20% of patients have at least one affected first-degree relative, with a non-Mendelian pattern suggestive of multifactorial, polygenic inheritance.[7] The present study was conducted to assess cases of vitiligo.

In this study, out of 138 patients, males were 78 and females were 60. Guan et al[8] 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% (95%CI: 0.1%–0.2%) and from 22 hospital-based studies was 1.8% (95%CI: 1.4%–2.1%). 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 (t = 0.47, P = 0.643), while a significant publication bias existed in population- or community-based studies (t = 2.31, *P* = 0.026).

We found that common type of vitiligo was segmental seen in 36, non- segmental in 58 and undetermined in 24. Shameer et al[9] studied 103 patients with vitiligo and 103 healthy sex and age matched controls. Serum zinc levels were measured in these two groups using atomic absorption spectrophotometry and compared with each other. The mean serum zinc level was 92.1 mcg/dl in the focal vitiligo, 81.3 mcg/dl in the generalized vitiligo, and 91.8 mcg/dl in the control group. A significant difference in serum zinc levels was observed between the patients with generalized vitiligo and the controls. Lower serum zinc levels were also correlated with longer duration of the disease. Furthermore, a negative relationship was found between serum zinc level and age of patients with vitiligo.

In general, the prevalence of vitiligo showed a relatively decreased trend with increase in the times. Especially, it has remained at a low level in recent two decades in both population- or community-based studies and hospital-based studies. The association between vitiligo and its autoimmune diseases, such as autoimmune thyroid diseases, psoriasis, pernicious anemia, Addison's disease et al has been frequently described in the literatures. As vitiligo may accompany with other diseases or disorders, we assume that the decreasing prevalence may be beneficial from development of diagnostic tools or improvement of screening programs or therapeutic methods of vitiligo-related diseases or disorders.[10]

CONCLUSION

Authors found that case of vitiligo is not uncommon nowadays. Common type reported was segmental, non-segmental and undetermined.

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