

Original Research Article

A prospective study of vitiligo cases in Government Dharmapuri Medical College Hospital

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ABSTRACT

Background: Vitiligo is a pigmentary disorder of skin whose precise etiology is not known, though it is considered to be genetic, an autoimmune skin disorder in which there is a loss of skin pigment. This disease can occur at any age. Vitiligo affects various parts of the body. Though various modalities of treatment became available, still produces significant social stigma and leads to a psychological impact on the patient.

Methods: 100 cases of vitiligo patients attending Dermatology outpatient Department at Govt Dharmapuri Medical college hospital during the period of January 2017 to June 2017 were included in the study. Informed consent was obtained from all the patients and from parents in case of children. A detailed history was obtained and dermatological/systemic examination was done using a proforma. Necessary investigations were done. A psychiatric evaluation was done for all.

Results: Females were more involved than males in our study. The youngest patient recorded in our study is 6 years. Exposed areas are more involved. The leg is the most common site involved followed by hands. 8 percent of patients had associated diabetes mellitus, hypothyroidism (2%), and hyperthyroidism (1%). Depression was seen in 8 percent of the patients. Marital conflict (3%) and delayed marriage (5%) was recorded in the study.

Conclusions: Though various research studies and treatment modalities became available for this pigmentary disorder it still remains a social stigma. Females were little more involved in our study which may be due to a cosmetic concern. Associated diabetes mellitus and thyroid disorders support autoimmune etiology.

Keywords: Vitiligo, Thyroid profile, Post inflammatory hypopigmentation, Psychiatric assessment

INTRODUCTION

Vitiligo is an acquired progressive melanocytopenia of unknown etiology whose exact aetiopathogenesis is not known. Four pathogenic theories suggested are- immune, neural, self-destruction and genetic hypothesis. It is a pigmentary disorder of skin which is also of cosmetic concern. It causes social stigma which leads to a psychological impact on the patient and family. It affects

all races and both sexes are equally involved. In India, the incidence is 3-4% and 20% of patients have a family history of vitiligo.¹ Vitiligo affects various parts of the body. Besides genetic factors, many epigenetic factors play in etiopathogenesis. Alteration in immune surveillance is an important cause for the destruction of melanocytes.² To study the pattern of disease in terms of sex, site, associated conditions and psychosocial impact of vitiligo patients.

METHODS

100 cases of vitiligo patients attending our outpatient department from January 2017 to June 2017 were included in the study. Informed consent was obtained from all the patients and parents in case of children. The diagnosis was made clinically and data were collected using the proforma about their age, sex, past history, associated illness and family history and recorded. Thorough dermatological and systemic examination was done. Patients with post inflammatory hypopigmentation were excluded from the study. Blood investigations like hemoglobin, blood sugar (fasting and postprandial), and thyroid profile were also done for necessary patients. Psychiatric assessment was done for all the patients and counseling given.

Statistical analysis

Results will be expressed as mean±standard deviation and range. Unpaired 't' test will be used to compare between male and female.

RESULTS

Out of 100 patients, 56 were females (56%) and 44 were males (44%). 31 (31%) were below 12 years in paediatric age group and 69 (69%) were adults. The youngest patient in our study is 6 years and oldest patient was 72 years.

Table 1: Sex distribution among children and adult patients.

Sex	Children	Adult	Total
Male	13	31	44
Female	18	38	56
Total	31	69	100

Table 2: Site of involvement and its percentage.

Site	No. of cases	Percentage (%)
Shin of leg	57	57
Hands	21	21
Foot	12	12
Trunk	6	6
Mucosal	3	3
Face	1	1

The family history of vitiligo was present only in 5 % of cases which shows less influence of genetic factors. Shin of the leg is the commonest site involved in our study (57%), followed by hands (21%), foot (12%), trunk (6%), mucosal (3%) and face (1%). Results show exposed areas are more commonly involved than unexposed areas.

Cases were evaluated for other associated systemic illness which is shown in Table 3. Diabetes mellitus was present in 8 percent of patients, hypothyroidism in 2%

and hyperthyroidism in 1% of cases. Alopecia areata was seen in 3 % of the patients.

Table 3: The percentage of other disorders associated with vitiligo.

Condition	No. of patients	Percentage (%)
Diabetes mellitus	8	8
Hypothyroidism	2	2
Hyperthyroidism	1	1
Alopecia areata	3	3

Table 4: The psychosocial impact of disease on patients.

Condition	No. of patients	Percentage (%)
Depression	8	8
Marriage conflict	3	3
Delayed marriage	5	5

A psychiatric evaluation was done for all patients to know the impact of disease which is shown in Table 4. Depression was seen in 8% of the vitiligo patients out of which 7 were females. Marital conflict in 8% and delayed marriage in 5% of patients were recorded out of which all are females.

DISCUSSION

Vitiligo is a pigmentary disorder of skin caused by the selective destruction of melanocytes occurring at all ages. Many theories have been proposed regarding its etiology. Though various treatment modalities have become available still this disease remains as a social enigma. Though many studies show there is no particular sex predilection³ in our study there is slight female preponderance (56%) when compared to males (44%) which may due to a cosmetic concern. In our study involvement in children is (31%) when compared to adults (69%). Among children also there is little female preponderance in our study. Family history was present only in 2% of cases whereas a study by Behl et al showed 6.25%.⁴ Exposed extensor aspect of the body is more involved in our study. Shin of the leg is involved more commonly (57%) followed by hand (21%). A study by Sarin et al shows similar results.⁵ Vitiligo can be associated with other autoimmune disorders like Diabetes mellitus, hashimoto's thyroiditis, alopecia areata, SLE etc.^{6,7} In our study we have evaluated for associated systemic illness which showed 8% of patient had diabetes mellitus, where similar results is seen in a study by Dauber et al. One patient had hypothyroidism and one had hyperthyroidism when compared to 7 % cases were associated with graves diseases in a study.⁸ Altar et al in a study on 192 vitiligo patients in the age group 6-60 years found that generalised type of vitiligo was present in

72.9%. Among patients with vitiligo, 84% were thyroid, 15% hypothyroid and 1% hyperthyroid which is comparable to our study.⁹ 3 patients had associated alopecia areata. Though various treatment modalities became available now there is still a social stigma about this disease which causes several psychological problems. Many cases are associated with depression and mood disorders. Depression was seen in 8 cases (7 females, 1 male), marriage conflict in 3 cases and delayed marriage in 5 cases (all females).¹⁰

CONCLUSION

Our prospective study in 100 vitiligo cases showed a little female preponderance. 8 cases were associated with Diabetes mellitus and few were with thyroid disorders and alopecia areata which supports the autoimmune theory. 8 cases had associated depression and marital disharmony in few patients. Though many treatment modalities are now available, people were still panic about this disease. Proper awareness to be created about this disease and various modalities of treatment available to the public so that vitiligo is no more a nightmare.

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