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ORIGINAL ARTICLE

Clinical Profile And Management Pattern Of Vitiligo Patients In A Teaching Hospital In Western Nepal

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ABSTRACT

The present study analyzed the clinical profile and management pattern of vitiligo patients in a teaching hospital in western Nepal. The list of vitiligo patients who visited the dermatology outpatient department was collected. Based on the list, the patients' files were taken from the medical record department and were analyzed as per study objectives. Vitiligo was found to be more common in the age group of 11-20 years (41.7%) and in urban population (64%). It generally started at teen and pre-teen ages. Most of the patients were given Psoralen ultraviolet –A (PUVA) therapy and corticosteroids. Most patients had no history of prolonged drug intake prior to onset of lesions. Concurrent dermatological diseases were found in 12.17% of the patients with vitiligo, 48.68% of patients had no other illness and the rest had unrelated diseases affecting gastrointestinal, gynecological and respiratory systems. Similar studies covering larger number of patients are needed to confirm our findings.

Key Words: Clinical profile, Nepal, Vitiligo.

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Introduction

Vitiligo is a depigmenting disorder of the skin of spontaneous onset. Occasionally, the loss of melanin (ie, hypopigmentation) is partial [1]. It is an acquired progressive disorder in which some or all of the melanocytes in the interfollicular epidermis, and occasionally those in the hair follicles, are selectively destroyed. It presents in childhood or adult life. It often involves the hands, wrists, axilla, periorbital, perioral and anogenital skin [2]. Spontaneous repigmentation may occur. Trauma and sunburn may precipitate the appearance of Vitiligo. A curious phenomenon called koebnerization often occurs in vitiligo, where lesions develop primarily at the sites of repeated trauma [1], [3]. Most evidence support autoimmune etiology, focusing on the presence of circulating antibodies against melanocytes and the association of Vitiligo with other autoimmune disorders such as pernicious anemia [1], addison disease [4], Diabetes Mellitus [5] and autoimmune Thyroiditis [1], [2], [6]. Worldwide it is estimated that nearly 1% of the population is affected by vitiligo [2], [7]. The highest incidence of the condition has been recorded in Indians from the Indian subcontinent, followed by Mexicans and Japanese[8]. Data regarding the clinical profile and management pattern of vitiligo are lacking in Nepal. Hence we carried out the present study with the following objectives.

1. To study the demographic details of the vitiligo patients visiting the Manipal Teaching Hospital (MTH)
2. To study the drugs used in management of vitiligo
3. To study the concurrent illness of the patients suffering from vitiligo.

Methodology

Study type

Retrospective study

Inclusion Criteria

All vitiligo patients visiting the dermatology outpatient department of Manipal Teaching hospital between the periods of January 1st 2006- Dec 31st 2006 were included.

Study Site

MTH, 700 bedded hospital located at Phulbari, Pokhara (having an average occupancy of around 300 beds)

Study duration

One year duration

Method of data collection

We went through the records of the patient presenting to from Jan 1st to Dec 31st, 2006, and collected the data regarding people diagnosed as vitiligo.

Method of Data Analysis

The data obtained from the filled patient profile form were entered in the Microsoft excel programme and were analyzed. The SPSS version 9.0 was used for descriptive statistics.

Results

Total 139 patients visited the dermatology out patient department during the study period. The distribution of vitiligo among the patients was 53.2% in males (n=74) and 46.8% in females (n=65). Among the total 139 patients 89 (64%) were from urban areas and the remaining 50 (36%) were from rural areas. The Mean ± SD age of the patients was 25.06± 17.6 years. The age distribution of the patients is listed in (Table/Fig1)

(Table/Fig 1). Age distribution of the patients (n=139)

Age in years	No of patients	Percentage
Up to 10 years	20	14.4
11 to 20 years	58	41.7
21 to 30 years	24	17.3
31 to 40 years	14	10.1
41 to 50 years	9	6.5
51 to 60 years	4	2.9
61 to 70 years	7	5
Above 70 years	3	2.1

Follow-up details: The number of times the patients were followed up was noted. We found that number of visits were more than five per patient. The details regarding the follow ups are listed in [Table/Fig 2].

(Table/Fig 2). Number of follow ups (n= 139)

Number of follow ups	Number	Percentage
Nil	43	31.2
Up to 5	63	45.7
6 to 10	13	9.4
11 to 15	7	5.1
16 to 20	7	5.1
21 to 25	3	2.2
26 to 30	1	0.7
More than 30	1	0.7
Details not available	1	0.7

Onset of vitiligo: The age of onset of vitiligo was studied and the details are listed in [Table/Fig 3].

(Table/Fig 3). Age at which vitiligo started (n=139)

Age (in years)	**No of patients**	**Percentage**
Up to 10 years	15	10.8
11 to 20 years	16	11.5
21 to 30 years	4	2.9
31 to 40 years	4	2.9
41 to 50 years	4	2.9
51 to 60 years	0	0.0
61 to 70 years	3	2.2
Above 70 years	0	0.00
Details not available	93	66.91

Drug therapy for vitiligo:The drugs used in the management of vitiligo were studied and

the details are listed in [Table/Fig 4].

(Table/Fig 4). Drug used in the management of vitiligo (n=307)

Dosage form	Generic name	No. of patients given	Percentage
Lotion	Placental extract	100	32.6
Cream, Ointment	Fluticasone	88	28.7
Tablet	Levamisole	41	13.4
Capsules	Vitamin-B complex	37	12.1
Cream, Ointment	Steroids other than Fluticasone	15	3.9
Capsules	Bioquest liquid oxygen supplement	12	3.9
Cream, Ointment	Clobetasol propionate	9	2.9
Tablet, Solution	Methoxsalen	8	2.6

Note: A patient might have been prescribed more than one drug.

Drug history of the patients:The drug history of the vitiligo patients was studied and the details are listed in [Table/Fig 5].

(Table/Fig 5). Drug history (n=230)

Drug category	Number of patients	Percentage
No drug history	113	51.4
Dermatological agents	27	12.3
Drugs acting on gastrointestinal and hepatobiliary system	19	8.6
Antibiotics	15	6.8
Cardiovascular drugs	8	3.6
Drugs acting on CNS	8	3.6
Drug acting on respiratory system	6	2.7
Antihistaminic drugs	5	2.3
NSAIDS	4	1.8
Skeletal muscle relaxants	3	1.4
Corticosteroids	2	0.9
Miscellaneous	10	4.6

Concurrent illness: The various concurrent illnesses of the patients are listed in [Table/Fig 6].

(Table/Fig 6). Other concurrent illness (n=189)

Disease	No. of patients	Percentage
Dermatological	23	12.2
Gynecological	13	6.9
ENT	10	5.3
Eye	10	5.3

Discussion

In our study, vitiligo was found to be more common among the age group of 11-20 years of age which is in agreement with few other studies [1], [9]. This may be artefactual as this age group is more cosmetically conscious. In the contrary, one study [8] showed that it is equally common in all age group. Our study revealed an almost equal prevalence in both sexes,which is similar to other studies. [8], [9], [10]

The compliance was found to be poor in patients which may be because of unsatisfactory treatment, [1], [2], [11] expensive medicines and long duration of therapy. The disease was found to be more common in people in urban setting compared to the people in rural settings. This however may be due to the fact that people in urban areas are more conscious about health and the other fact being that our hospital is located in an urban area.

In our study, the most commonly used treatment modalities were Bath PUVA therapy (in which patient lies in a bathtub containing 0.75% topical psoralen for 20 minutes, and later exposes to UVA source, either in a UVA chamber or to natural sunlight) and corticosteroids. PUVA therapy has been commonly used worldwide [1], [2], [11], [12], [13], [14], [15]. Other modalities, especially in stable vitiligo and localized lesions are surgical manipulations including minigrafts [16] and autologous transplantation methods [17] which are yet to be tried in our part of the world.

We found drug history to be irrelevant in the causation of vitiligo. It is unclear whether use of certain oral medications may also be associated with vitiligo. For example, whereas infliximab has been known to produce a lupus-like syndrome; it has also been described as inducing vitiligo, probably through the same or similar autoimmune mechanism [18].

Generally, vitiligo is found to be concurrent with other dermatological illnesses like tinea versicolor, tinea cruris and leukotrichia. Leukotrichia [8] and halo nevi [8], [12] have been mentioned in other studies as well. Vogt-Koyanagi-Harada syndrome is the commonest vitiligo associated syndrome mentioned in some studies [19], [20], [21], [22] the full constellation of which includes vitiligo, poliosis, alopecia with panuveitis

and auditory and neurological manifestations.

Limitations

Our study had a few limitations, notable ones being: a retrospective study with occasional incomplete data due to poor documentation in the patient files. Only one centre was involved and the population studied was less. Hence, it is difficult to generalize our finding to the entire western Nepal. We could not assess the response to the above mentioned treatments as there was no adequate follow-up in most cases.

Conclusion

The present study was successful in identifying the clinical profile and management pattern of vitiligo patients in Western region of Nepal. Vitiligo was found to be more common in the age group of 11-20 years (41.7%). Vitiligo was found to be associated with other auto-immune diseases only in 2.1% of the total cases. PUVA therapy and Corticosteroids were the common management pattern. Vitiligo was found to be concurrent in 12.17% of the patients with other dermatological illness. Similar studies covering larger number of patients are needed to confirm our findings.

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