

Research Article**A Single Centre Study on Epidemiological and Clinical Aspects of Pityriasis Versicolor and Prevalence of Other Dermatoses with High Sebum Production****Kewal Krishan¹, Amit Badgal², Devraj Dogra³, Naina Dogra⁴**¹Postgraduate, Department of Dermatology, GMC Jammu, JK, India²Senior Resident, Department of Medicine, MMMCH, Solan, HP, India³Professor and Head, Department of Dermatology, GMC Jammu, JK, India⁴Associate Professor, Department of Dermatology, GMC Jammu, JK, India***Corresponding author**

Dr. Amit Badgal

Email: badgalamit@yahoo.com

Abstract: Pityriasis versicolor is a fungal infection described in the literature worldwide. It is characterized by appearance of macules and patches surrounded by normal skin. The concomitant dermatoses found to occur along with Pityriasis versicolor are acne vulgaris, seborrheic dermatitis, pityriasis folliculitis, pityriasis capitis and atopic eczema. This study was carried out in Post Graduate Department of Dermatology, Government Medical College, Jammu, from November 2013 to November 2014. Clinical examination was done to determine the characteristic morphology of the lesions, site of involvement, number of sites involved, colour and size of the lesions and presence of other skin diseases with high sebum production was noted.**Keywords:** Pityriasis versicolor, Dermatoses, High Sebum Production.

INTRODUCTION

Pityriasis versicolor is caused by fungus known as *Malassezia furfur* [1]. It is characterized by the presence of multiple colors and scaly lesions like 'bran' [2]. A prevalence of 30-40% has been reported in tropical areas [3]. The risk factors for developing Pityriasis versicolor include warm season, profuse sweating, malnutrition, cushing disease, pregnancy and the use of oral contraceptive pills [4]. The scalp, face, central chest and back are the common sites of colonization [5]. The lesions are macules or patches surrounded by normal skin. The lesions may be hypopigmented, dark brown or erythematous [6]. The cosmetic effect of hypopigmentation brings the patient to the dermatologist [7]. The seborrheic dermatitis is characterized by the presence of greasy scales [8]. Pityriasis capitis presents as dandruff, Pityrosporum folliculitis manifests as a follicular papulopustular eruption with pruritus [9]. Neonatal cephalic pustulosis is a non-follicular pustular eruption that occurs in 3% of the hospitalized neonates [10]. *Malassezia* yeasts have a role in the pathogenesis of atopic eczema [4].

METHODOLOGY

This study was carried out in Post Graduate Department of Dermatology, Government Medical College, Jammu, from November 2013 to November 2014. A thorough clinical examination was carried out in all the patients to determine the characteristic

morphology of the lesions, site of involvement, number of sites involved, colour and size of the lesions and presence of other skin diseases with high sebum production was noted. The diagnosis was confirmed by Wood's lamp examination and KOH examination of skin scraping.

RESULTS AND DISCUSSION

The mean age of the patients visiting the Dermatology outpatient department was 24.62±9.46 years. Tarazooie *et al.* [11] too in their study reported highest prevalence in patients between 20-30 years of age. The clinical characteristics of the patients are presented in the tabulated form.

Kabbin *et al.* similarly showed a predominant involvement of males as compared to females [12]. Banerjee S *et al.* had reported that duration of disease in 28.75% of the patients between was between 1- 20 year (Ranging from 7 days to 20 years) [2]. Rao *et al.* had similarly reported the presence of family history in 38.3% of the patients [13]. Uneke *et al.* had reported that the number of occupants per room was directly related to the incidence rates of Pityriasis versicolor [14]. 1.62% of the patients with Pityriasis versicolor had history of immunosuppressive therapy in the past. The history of immunosuppressive therapy was similarly reported in 2.37% of the patients and pruritus in 47% in another study [15].

Table 1: Clinical characteristics

Mean age (years)	24.62± 9.46
Male : Female	191 (51%): 179 (49%)
Rural: Urban	222 (60%): 148 (40%)
Mean duration of disease at presentation (years)	2.93±1.36
Peak incidence August: September	66(17.84%): 59(15.95%)
Family history	23.78%
Overcrowding + Poor personal hygiene	27.03%
Immunosuppressive therapy	1.62%
History of recurrence	80(21.62%)
Itching	110 (29.73%)

Table 2: Characteristics of the lesions

Hypopigmented: Hyperpigmented: Erythematous	279(75.41%): 17(4.59%): 41(11.08%)
Site of involvement Back: Chest: Neck: Upper limb: Shoulder	43.24%: 22.97%: 15.95%: 5.41%: 5.41%
Wood's lamp (fluorescence seen)	87.84%
KOH smear examination (+ve)	55.68%
Seborrheic dermatitis: Pityriasis capitis: Acne vulgaris: Pityriasisporum folliculitis: Atopic eczema	9.73%: 7.03%: 14.05%: 3.24%: 3.24%

Hypopigmented lesions were reported in 75% of the patients, hyperpigmented lesions were reported in 8.3% of the patients and mixed variety in 16% of the patients in the literature, the predominated site of lesion being reported to be neck (71%) and chest 58%, validating the findings in the present study. The fluorescence was seen under Wood's lamp in 87% of the case and KOH smear examination showed positive result in 55% of the cases. Similar results with fluorescence under Wood's lamp in 78% and positive result on KOH preparation in 46% have been reported previously [12]. In the present study, seborrheic dermatitis, Pityriasis capitis and acne vulgaris were found to have a prevalence of 9.7%, 7% and 14% respectively which has been corroborated in another study with prevalence of seborrheic dermatitis being 11% [15].

CONCLUSION

The peak incidence of Pityriasis versicolor occurs during August and September predominantly in the adult population with high incidence of recurrence. The history of overcrowding, poor personal hygiene and presence of family history have been associated with the development of Pityriasis versicolor. Seborrheic dermatitis, Pityriasis capitis and Acne vulgaris have been the other dermatoses with high sebum production that may coexist with Pityriasis versicolor.

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