



## AN ASSESSMENT OF PALMAR DERMATOSES OCCURRING ABOVE 18 YEARS OF AGE IN A TERTIARY CARE HOSPITAL

### Dermatology

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### ABSTRACT

**Background:** To stratify and describe the distribution of dermatoses occurring on the palms in patients attending Dermatology OPD

**Methods:** A total of 50 patients with palmar lesions were subjected to full history taking and thorough dermatological examination and photographs were taken.

**Results:** Among 50 patients, 26 (52%) were males and 24 (48%) were females. 22 patients (44%) were in ages 18 to 30 years, 16 (32%) were between 31 and 45 years, 9 (18%) were 46 to 60 years age group and 3 patients (6%) were above 61 years of age. 28% (14 patients) were students, 20% (10 patients) were housewives, occupations such as bank employees, software professionals constituted 12% (6 patients), other skilled work such as tailors, cooks, drivers consisted 12% (6 patients) and farmers were 6 in number (12%), other unskilled labour such as masons, grocery clerks were 10% (5 patients, 3 patients (6%) were unemployed. Palmoplantar psoriasis seen in 14 patients (28%), pustular psoriasis in 2 (4%), palmar warts and chronic cumulative irritant dermatitis in 6 patients each (12%), keratolysis exfoliativa, candidiasis and hyperhidrosis were seen in 3 patients each (6%), pompholyx and dermatophytosis was seen in 2 patients each (4%), and 1 case (2%) each of vitiligo, erythema multiforme, PPK and fingertip eczema were seen. 26% (13) had involvement of soles.

**Conclusion:** In our study, males were more commonly affected than females, most common age group presented were between ages 18 and 30, most common occupation came across were students followed by housewives. Most common dermatoses observed was palmoplantar psoriasis and soles were involved in close to one-third of patients in the study.

### KEYWORDS

Palms, Dermatoses, Soles

### INTRODUCTION

Palms and soles are the readily visible areas of the body that are affected in various dermatoses. This may have considerable concern to the patient and can cause diagnostic dilemma at times. Moreover, palmar dermatoses also limit our day to day activities, and thereby have a significant impact on the quality of life. Routine day to day activities are affected and can lead to loss of daily wages in patients, particularly from rural areas such as ours<sup>1</sup>

Palmar dermatoses include all the skin diseases which involve palms and soles exclusively, most common dermatoses include Psoriasis, Eczemas, Fungal infections and Drug reactions. Other conditions include Vitiligo, Lichen planus, Viral warts, Pompholyx, Hyperhidrosis, Palmoplantar Keratodermas, Viral infections like Hand foot mouth disease<sup>2</sup>

Palmar dermatoses are very commonly seen in farmers and manual laborers as they are engaged in strenuous physical work and are exposed to various forms of trauma, friction, and chemicals. Similarly, housewives are also exposed to various detergents and water while doing washing and cleansing work. They frequently come in contact with vegetable juices which makes their palms and soles prone to various dermatosis<sup>3</sup>

In our Study, we will be seeing the clinical findings of lesions on the palms and their prevalence, looking into the most common conditions occurring on the palms.

### METHODS

**Study Design & Method:** Cross sectional Observational study.

### Study Area:

Skin Outpatient Department at Sree Balaji Medical College and Hospital

### Study Population:

All patients attending skin OPD, who have lesions on the palms.

**Sample Size:** 50 (Convenient sampling)

**Study period:** October 2019 to December 2019

### Exclusion criteria:

1. Patients having lesions elsewhere in the body other than palms and soles
2. Patients below 18 years of age
3. Patients not consenting for the study

### Inclusion criteria:

1. Patients may or may not having lesions on soles
2. Patients above 18 years of age
3. Patients consenting for the study

The recruited patients were subjected to the following,

- a) Full History Taking
- b) Thorough Dermatological Examination.
- c) Photographs were taken

### Study procedure:

The study was approved by the ethical and research committee. Each patient was given a written informed consent and the study was explained in detail. Once a detailed history was taken, thorough clinical examination was done and photographs were taken.

### RESULTS

Among 50 patients, 26 (52%) were males and 24 (48%) were females. 22 patients (44%) were in ages 18 to 30 years, 16 (32%) were between 31 and 45 years, 9 (18%) were 46 to 60 years age group and 3 patients (6%) were above 61 years of age. 28% (14 patients) were students, 20% (10 patients) were housewives, occupations such as bank employees, software professionals constituted 12% (6 patients), other skilled work such as tailors, cooks, drivers consisted 12% (6 patients) and farmers were 6 in number (12%), other unskilled labour such as masons, grocery clerks were 10% (5 patients, 3 patients (6%) were unemployed. Palmoplantar psoriasis seen in 14 patients (28%), pustular psoriasis in 2 (4%), palmar warts and chronic cumulative

irritant dermatitis in 6 patients each (12%), keratolysis exfoliativa, candidiasis and hyperhidrosis were seen in 3 patients each (6%), pompholyx and dermatophytosis was seen in 2 patients each (4%), and 1 case (2%) each of vitiligo, erythema multiforme , PPK and fingertip eczema were seen. 26% (13) had involvement of soles.

**DISCUSSION**

A male preponderance (52%) was seen in our study similar to that observed by Khandpur et al<sup>1</sup>. In present study, most common age group affected is between 18 and 30 years of age (44%) whereas in a study by Kang et al., a maximum incidence was seen in two age groups 40-49 years and 50-59 with 18.1% each<sup>5</sup>.

28% (14 patients ) were students, 20% (10 patients ) were housewives, occupations such as bank employees, software professionals constituted 12% (6 patients), other skilled work such as tailors, cooks, drivers consisted 12% (6 patients) and farmers were 6 in number (12%), other unskilled labour such as masons, grocery clerks were 10% (5 patients, 3 patients (6%) were unemployed. Due to increased awareness, many students came to consult compared to other professionals. This reflects the functional importance of the palms and soles in one's occupation. When dermatosis affects palms and soles, it impairs the activity of individual especially manual labourers.

In our study, 26% patients (13) had involvement of soles, whereas 74% (37 patients) had lesions only over the palms. While in study by Kang et al., palmoplantar dermatoses appeared on the palms only in 20.6% patients and on both the palms and soles in 27.4% patients, which could be due to the occupational status<sup>5</sup>.

Palmoplantar psoriasis seen in 14 patients (28%), pustular psoriasis in 2 (4%), palmar warts and chronic cumulative irritant dermatitis in 6 patients each (12%), keratolysis exfoliativa, candidiasis and hyperhidrosis were seen in 3 patients each (6%), pompholyx and dermatophytosis was seen in 2 patients each (4%), and 1 case (2%) each of vitiligo, erythema multiforme , PPK and fingertip eczema were seen. The most common five diseases in a study by Hongal et al., were palmoplantar psoriasis (20.7%), moniliasis (19%), palmoplantar hyperhidrosis (7%), keratolysis exfoliativa (6%) and pitted keratolysis (6%)<sup>6</sup>. However, in the study by Kang et al., the most common five diseases of palmoplantar dermatoses were palmoplantar pustulosis (23.2%), verruca (11.4%), pompholyx (10.1%), palmoplantar keratoderma (8.9%) and contact dermatitis (8.0%)<sup>7</sup>

**CONCLUSION**

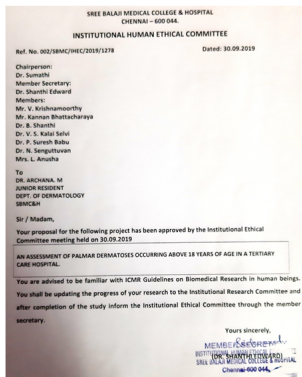
The term palmoplantar includes a wide variety of disorders, no standard classification exists for palmoplantar dermatoses. Most affected age group was between 18 and 45 years of age attributed to increased risks/trauma/contact while working. When dermatoses affect palms and soles, it impairs even daily activities of the individuals. A study with a larger population has to be carried out in order to find the incidence, prevalence and distribution of dermatoses over palms and soles.

**ACKNOWLEDGEMENTS :** None

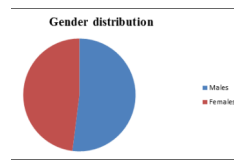
**DECLARATIONS :** Funding : None

**Conflict of interest :** None declared

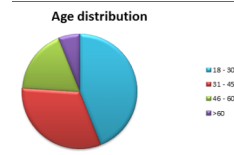
**Ethical approval :** Obtained



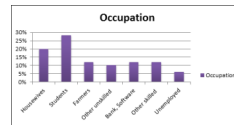
**LEGENDS TO FIGURES**



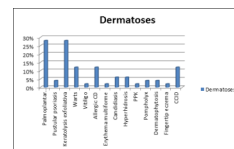
**Figure 1: Pie chart with Gender distribution**



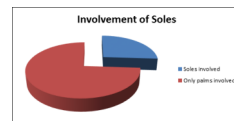
**Figure 2 : Pie chart showing Age distribution**



**Figure 3 : Bar diagram depicting different Occupations**



**Figure 4 : Various Dermatoses Observed**



**Figure 5 : Involvement of soles**



**Figure 6A : Multiple Palmar warts**



**Figure 6B : Target lesions of Erythema multiforme**



**Figure 6C : Vitiligo affecting palms**



**Figure 6D : Psoriatic plaques and fissures on palms**

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