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ASSESSMENT OF PLANTAR DERMATOSES IN PATIENTS WHO ARE MORE THAN 18 YEARS ATTENDING A TERTIARY CARE HOSPITAL

Dermatology

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ABSTRACT

Background: The study was done to stratify and describe the various types of plantar dermatoses occurring in patients more than 18 years
Methods: A total of 50 patients clinically diagnosed with plantar dermatoses were evaluated clinically and the results were obtained.
Results: Of the 50 patients, 33% were male and 17% were female. 36% were in the age group of 18-30 years, 18% were 31-40 years, 40% in 41 to 60 years and 6% were more than 60 years. We found that 22% patients had positive history of atopy, 26% had history of using occlusive footwear, 9% had hyperhidrosis and 17% gave history of contact with chemicals. 22% were farmers, 28% were students and software professionals,18% were housewives, 26 % were cooks, masons, bus conductors,grocery clerks and 6% were unemployed. 15% had palmoplantar psoriasis, 10% had eczemas, 3% had juvenile plantar dermatoses, 6% had callosities 5% had plantar warts, 1% had palmoplantar keratoderma, 4% had allergic contact dermatitis, 7% had tinea pedis and 5% had fissures.
Conclusion: There are a few studies showing the different types of plantar dermatoses. In this study we see the patterns as well as the colours in which it presents.

KEYWORDS

plantar dermatoses, psoriasis, juvenile plantar dermatoses, eczemas, palmar dermatoses.

INTRODUCTION

Various dermatosis affect palms and soles, few are specific to plantar surface of feet and are not seen elsewhere on body[1].

The most common conditions include eczemas, psoriasis, callosities, juvenile plantar dermatosis,plantar wart, palmoplantar keratoderma, hand foot mouth disease, piezogenic papules.

Eczemas affecting the plantar surface is caused either due to endogenous or exogenous factors. The most common cause of plantar eczemas are allergic and irritant contact dermatitis.

Palmoplantar keratoderma is characterized by skin lesions in palms, soles and also elsewhere in the body[2]. Psoriasis can present on the soles as typical scaly patches. Juvenile plantar dermatosis is most commonly seen in young boys. It is seen as forefoot eczema and is most commonly associated with atopic dermatits[3].

Tinea pedis has different manifestations and most commonly occurs in the interdigital spaces[4]. These are some of the most common dermatosis affecting the plantar surface of the feet. Treatment varies with each cause.

METHODS

Study Design: Pilot study.

Study Area: Skin Outpatient Department at Sree Balaji Medical College and Hospital, Chennai

Study Population: All patients attending skin OPD, clinically diagnosed with plantar dermatoses

Study Method: Cross Sectional study.

Sample Size: 50

Exclusion criteria:
Not consenting for the study.
Having lesions elsewhere in the body

Inclusion criteria:
Those consenting to the study.
Patients may or may not having lesions on the palms
The recruited patients were subjected to the following,
(A) Full History Taking
(B) Thorough General Dermatological Examination.
(C)Photographs.

STUDY PROCEDURE:
Each patient was given a written informed consent and the study was explained in detail. Once a detailed clinical examination was done, photographs were taken. The results obtained were tabulated in Microsoft Excel and analysed using SPSS software.

RESULTS:

Of the 50 patients, 36% were in the age group of 18-30 years, 18% were 31-40 years, 40% in 41 to 60 years and 6% were more than 60 years (Figure 1). Majority of the study population were men (33%) females constituted 17% (Figure 2).

In the present study, 22% of the patients had positive history of atopy, 26% had history of using occlusive footwear, 9% had hyperhidrosis and 17% gave history of contact with chemicals (Figure 3).

Based on occupation, 22% were farmers, 28% were students and software professionals,18% were housewives, 26 % were cooks, masons, bus conductors, grocery clerks and 6% were unemployed. (Figure 4)

Of the different types of plantar dermatoses in patients coming to our OPD, 15% had palmoplantar psoriasis, 10% had eczemas, 3% had juvenile plantar dermatoses, 6% had callosities 5% had plantar warts, 1% had palmoplantar keratoderma, 4% had allergic contact dermatitis, 7% had tinea pedis and 5% had fissures.(Figure 5)

DISCUSSION

In the present study, plantar dermatoses was found to commonly occur in males which was similar to a study conducted by KE Shackleford et al[5]. It was found that plantar dermatoses is usually seen in the age group of 31-40 years in the present study.

It was seen that 22% patients had positive history of atopy of which only 3% had Juvenile plantar dermatoses where we consider atopy as a risk factor. In a study conducted by Verbov et al stated that JPD occurs as a manifestation of atopy and also that the condition improved with warm weather[6]. The other risk factors that were observed in our study population were history of using occlusive footwear, history of contact with chemicals and hyperhidrosis in descending order of their prevalence.

Farmers constituted the majority of those with plantar dermatosis. 26

% were cooks, masons, bus conductors, grocery clerks. 28% were students and software professionals, 22% were farmers, 18% were housewives and 6% were unemployed It was seen that most of them had palmoplantar psoriasis (15%) and second most common were eczemas (10%).

The others, 3% had juvenile plantar dermatosis, 6% had callosities 5% had plantar warts, 1% had palmoplantar keratoderma, 4% had allergic contact dermatitis, 7% had tinea pedis and 5% had fissures. It was found that papulosquamous disorders were more common in the Indian population having plantar dermatoses.

CONCLUSION:

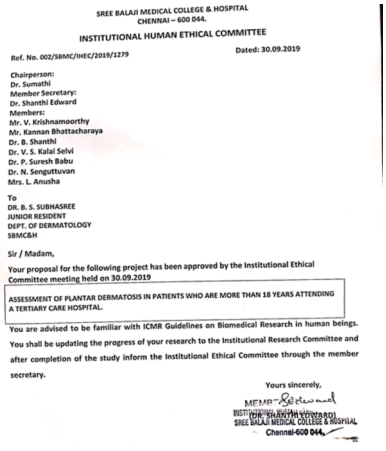
The term palmoplantar dermatoses includes a wide variety of conditions and no specific classification exists. It is more common in the age group of 31 to 40 years. It impairs the daily activities of patients and hence patient need immediate attention to their condition. The various types of dermatoses varies with each person based on the various riskfaactors, contact with chemicals and nature of work. A study with larger population has to be carried out to find the prevelance, incidence and distribution of dermatoses.

ACKNOWLEDGEMENTS

None

DECLARATIONS

Funding: None
Conflict of interest: None declared
Ethical approval: Obtained



SREE BALAJI MEDICAL COLLEGE & HOSPITAL
CHENNAI – 600 044.

INSTITUTIONAL HUMAN ETHICAL COMMITTEE

Dated: 30.09.2019

Ref. No. 002/SBMC/IHEC/2019/1279

Chairperson:
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Member Secretary:
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To
DR. B. S. SUBHASREE
JUNIOR RESIDENT
DEPT. OF DERMATOLOGY
SBMC&H

Sir / Madam,

Your proposal for the following project has been approved by the Institutional Ethical Committee meeting held on 30.09.2019

ASSESSMENT OF PLANTAR DERMATOSIS IN PATIENTS WHO ARE MORE THAN 18 YEARS ATTENDING A TERTIARY CARE HOSPITAL.

You are advised to be familiar with ICMR Guidelines on Biomedical Research in human beings.

You shall be updating the progress of your research to the Institutional Research Committee and after completion of the study inform the Institutional Ethical Committee through the member secretary.

Yours sincerely,

MEMBER SECRETARY
INSTITUTIONAL ETHICAL COMMITTEE
SREE BALAJI MEDICAL COLLEGE & HOSPITAL
Chennai-600 044.

Figure 1: Age distribution

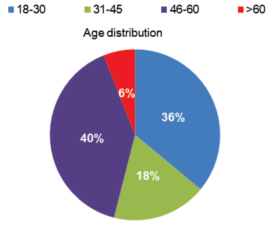

Figure 2: Gender distribution

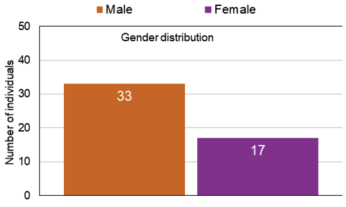

Figure 3: Risk Factors distribution

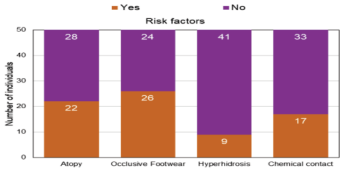

Figure 4 : Occupational distribution

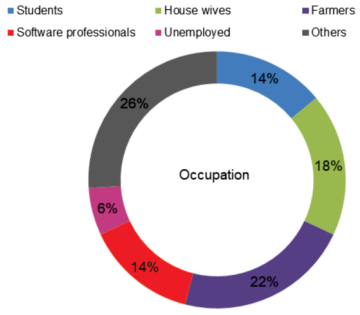

Figure 5: Types of Plantar Dermatoses

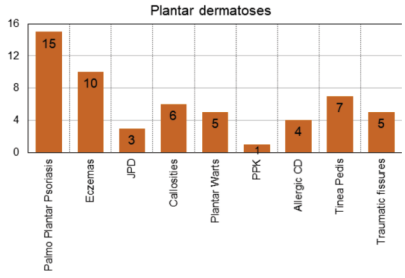

Figure 6: Different types of plantar dermatoses

REFERENCES:

1. Hongal AA, Rajashekhar N, Gejje S. Palmoplantar dermatoses-A clinical study of 300 cases. Journal of clinical and diagnostic research: JCDR. 2016 Aug;10(8):WC04.
2. Aygit AC, Baycin HN, Demiralay A. Malignant melanoma in association with palmoplantar keratoderma. European journal of plastic surgery. 1999 Feb 1;22(1):49-50
3. Svensson A. Prognosis and atopic background of juvenile plantar dermatosis and gluteo-femoral eczema. Acta dermato-venereologica. 1988;68(4):336-40.
4. Kalia S, Adams SP. Dermacase. Juvenile plantar dermatosis. Canadian family physician Medecin de famille canadien. 2005 Sep;51(9):1203-13.
5. Shackelford KE, Belsito DV. The etiology of allergic-appearing foot dermatitis: a 5-year retrospective study. Journal of the American Academy of Dermatology. 2002 Nov 1;47(5):715-21.
6. Verbov J. Atopic eczema localized to the forefoot. An unrecognized entity. The Practitioner. 1978 Mar;220(1317):465-6.