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Epidemiological and Clinical Features of Discoid Eczema: A Cross Sectional Study

[1]Dr. Aishwarya Raheja, MD Dermatology, Dr. D. Y. Patil Medical College, Hospital and Research Pimpri, Pune, Maharashtra, India

[2]Dr. Dipti Mathias, MD Dermatology, Dr. D. Y. Patil Medical College, Hospital and Research Pimpri, Pune, Maharashtra, India

[3]Dr. Bharat Swaroop Mittal, MS Orthopaedics, Dr. D. Y. Patil Medical College, Hospital and Research Pimpri, Pune, Maharashtra, India

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Corresponding Author: Dr. Aishwarya Raheja, MD Dermatology, Dr. D. Y. Patil Medical College, Hospital and Research Pimpri, Pune, Maharashtra, India

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Abstract

Background

Discoid eczema, classified as a form of endogenous eczema has a multi factorial etiology in which contact allergens play an important role.

Objective

The aim of this study was to study the epidemiological and clinical profile of patients presenting with discoid eczema.

Methods

Thirty patients attending dermatology clinics at a tertiary care hospital with discoid eczema were enrolled.

Results

Peak incidence of age at disease onset was found in the third decade of life with a male preponderance. Predominant site of lesions were lower 20 (52%) and upper 11 (30%) limbs, followed by dorsum of hands 3 (7%), face and neck 7(6.6%) and trunk 4(3.3%).The duration of illness ranged from 4 months to 15 years with a median duration of 2 years

Conclusions

Our study reports male preponderance, significant association with atopy, winter aggravation and dry type as the predominant type.

Introduction

Discoid eczema, also known as nummular eczema is characterised by circular/oval plaques with a clearly demarcated edge. It has a multifactorial etiology in which contact sensitivity plays an important role. [1, 2] The epidemiology of nummular eczema is not well described due to differing criteria used in various studies. Males are affected with discoid eczema more frequently.[4,5,6]Cowan and Hellergen reported that the peak incidence of nummular eczema occurred in patients aged 20-60 and 55-65 years respectively.[9,10] No ethnic or racial predisposition has been described.

Discoid eczema may be associated with an atopic diathesis, normal immunoglobulin E levels and staphylococcal colonization. [1, 3]Lowenvironmental humidity may also exacerbate eczema. Histologically the changes of acute to chronic dermatitis are observed. Discoid eczema usually has a chronic course with considerable quality-of-life impairment in severe and extensive disease. Recurrence at prior sites is often noted.[2]

The pathogenesis has not been fully explicated. A large proportion of these patients have underlying allergic contact dermatitis.

We present the results of a comprehensive study done to evaluate the epidemiological and clinical profile of patients presenting with discoid eczema.

Methods

Thirty consecutive outpatients clinically diagnosed with nummular eczema attending the dermatologic clinic at a tertiary care hospital in Pune, Maharashtra, India were included in the study. Approval of the institutional ethics committee was obtained and written informed consent was taken in all cases. Patients above the age of 18 years with discoid or oval eczematous plaques with clearly demarcated edges were included in this study.

A detailed history regarding demography, occupation, age at onset, personal or family history of atopy, site of initial lesions, extent, duration of disease, seasonal variation, aggravating factors, type of footwear, household or occupational exposure to various materials, was taken. Dermatological exam was carried and the morphology, site, size and distribution of lesions noted. Dermatophytic infection was ruled out in all the patients by taking scrapings from the lesions and analysing a KOH preparation of the same.

Results

Of the thirty clinically diagnosed cases of discoid eczema with age ranging from 20 to 60 years with a mean age of 35 years, 18 were male and 12 female. Occupational profile included 8 labourers, 7 housewives, 5 factory workers, 3 farmers and 7 others that included students, IT professionals and retired personnel(Figure 1). Positive history of atopy was seen in 7 out of 30, out of which 5 were males and 2 females.

Predominant site of lesions were lower 20(52%) and upper11 (30%)limbs, followed by dorsum of hands 3(7%), face and neck 7(6.6%) and trunk4(3.3%). (Figure 2)The duration of illness ranged from 4 months to 15 years with a median duration of 2 years .

Itching was found in all the patients, followed by complaints of scaling in 12(40%), oozing in 10(33.3%), burning in 15(50%), fissuring in 8(26.6%) and pain in 9(30%). Most common aggravating factors noticed were contact with irritants like cement, fragrance mix, rubber and nickel in artificial jewellery. 12 out of 30 patients also complained of winter aggravation.

Discussion

Nummular eczema is usually considered an endogenous affection. Peak incidence of age at disease onset was found in the third decade of life with a male preponderance which is consistent with the reports from other studies.

The association of atopy with nummular eczema is highly debated.In our study 23% had atopy, as defined by the presence of atopic eczema, hay fever, asthma, or conjunctivitis.

The variants of the disease include the exudative type, the dry type, discoid eczema of hands and exudative discoid &lichenoid chronic dermatitis (Sulzberger Garbe syndrome). [1, 8]In the present study, most of the cases were of dry type(40%) followed by exudative type(33.3%).

Generalized and severe nummular eczema is associated with considerable quality-of-life impairment (QoL).[7]The impairment in QoL is much greater in discoid eczema localized to the hands as compared to eczema localized to the feet. Hands being important not only for carrying out daily activities but also for social interaction, any eczema of the hands that is visible to others has a major impact on physical, mental and social well-being.[11]

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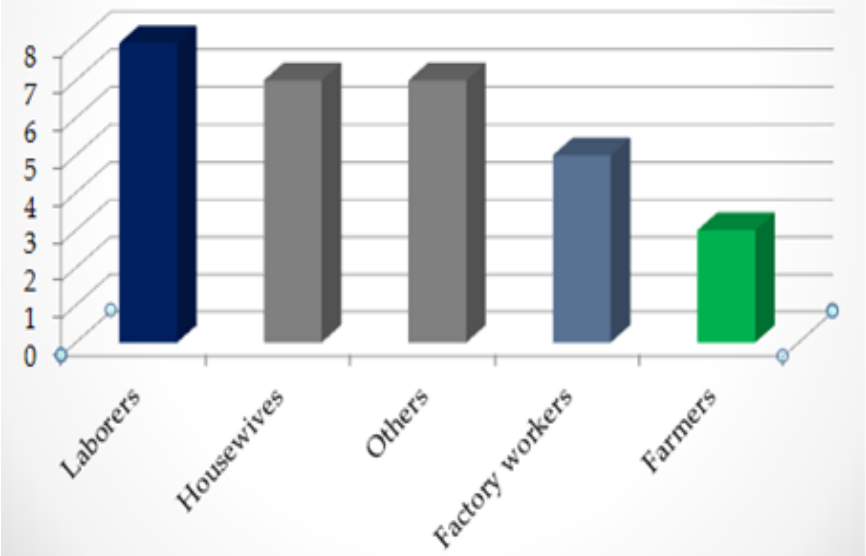

Figure 1: Occupational distribution of patients

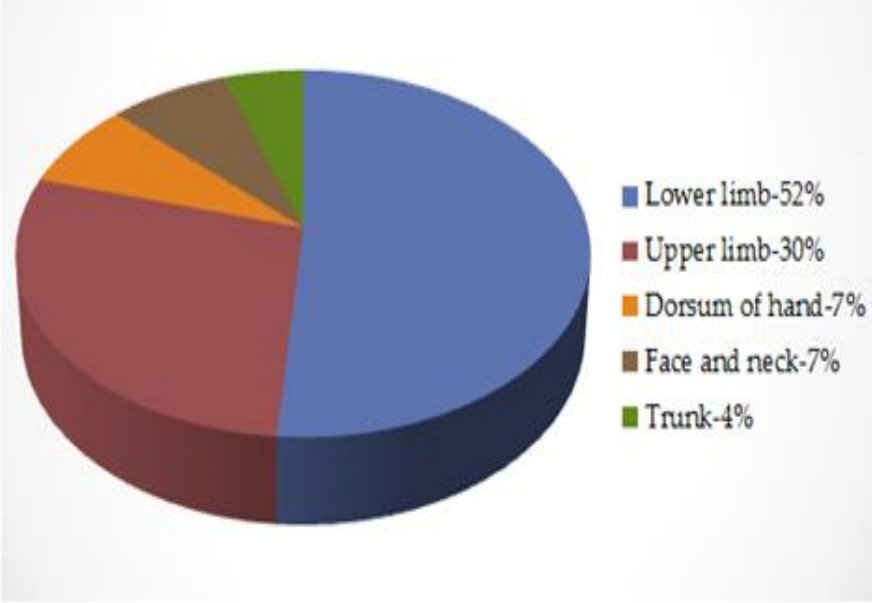

Figure 2: Distribution of lesions of nummular eczema