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DERMA TODAY

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Dear Doctor,

Greetings from Micro Labs. We are happy to bring you "Derma Today" which contains latest and interesting news in the field of Dermatology.

This issue contains:

Should you require any article or, medical information, please feel free to contact us medicalservices@microlabs.in

Looking forward to your valuable feedback.

Best Regards,

Medical Team, Micro Labs Limited.

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Pigmented linear discoid lupus erythematosus following the lines of Blaschko

Introduction

Lupus erythematosus (LE) is an autoimmune inflammatory disease with varying clinical presentations. It ranges from the disease's localized form (restricted to the skin), to the systemic form. Linear lupus erythematosus cutaneous, introduced by Abe et al. in 1998, is a uncommon subtype of LE presenting with linear lesions. The lesions are usually skin-limited without systemic involvement, and progression to SLE is rare. Linear lupus erythematosus (LE profundus), subacute lupus erythematosus (SCLE), bullous LE and longitudinal clustered scleroderma consistent with discoid lupus erythematosus (DLE) have been documented in literature. DLE is distinguished by erythematous, atrophic, hyperkeratotic, dyschromic discoid lesions and longitudinal discoid lupus erythematosus grows along the lines of Blaschko with a longitudinal or segmental pattern of DLE lesions.

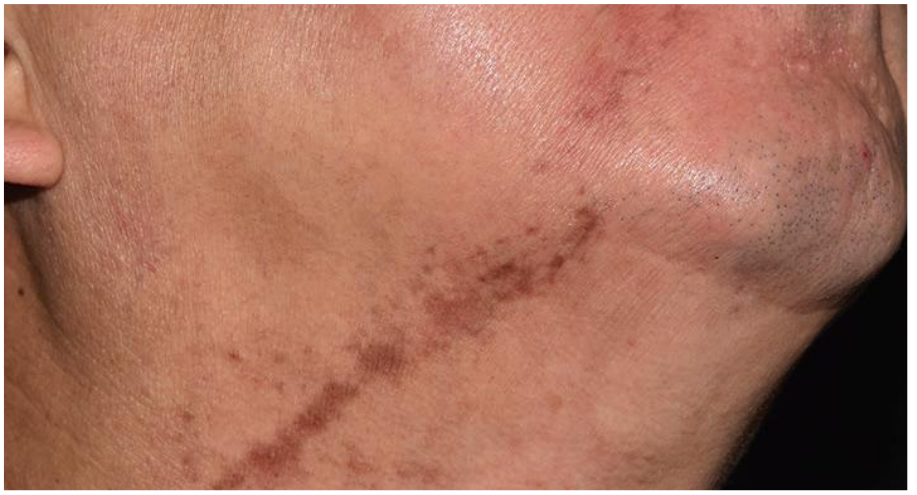
A few cases of pigmented linear discoid lupus erythematosus have been reported, which can be confusing in clinical differentiation from pigmented lichen planus, lichen planopilaris, atypical psoriasis, lichen sclerosus et atrophicus, lichen striatus and other dermatoses. The purpose of this research was to identify and classify the clinical and histopathological features in a series of 18 Chinese patients with pigmented linear discoid lupus erythematosus along the Blaschko row.

Methods

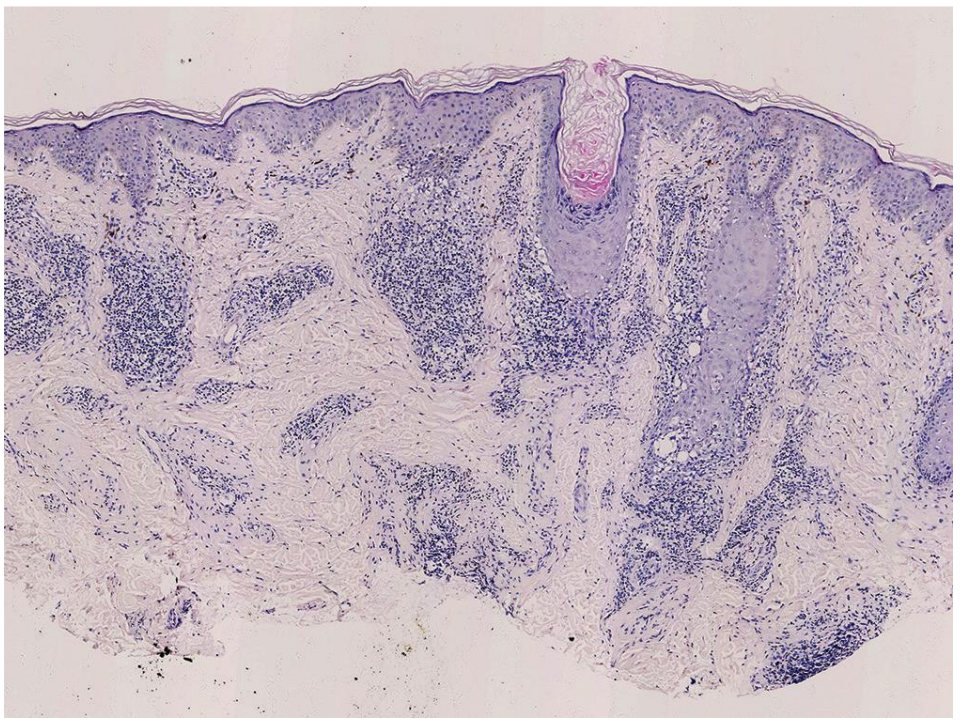
Eighteen patients with pigmented linear discoid lupus erythematosus attending the outpatient department of the Dermatology, Peking Union Medical College Hospital, China, were enrolled in the study. The authors recorded clinical data including sex, age at onset, disease duration, location and distribution of the lesions, symptoms, trigger factors, antinuclear antibody (ANA) testing, therapy, and therapeutic responses. Histopathological features were also summarized.

Results

All 18 patients presented with well-defined brownish pigmented linear or segmental macules or plaques, following the lines of Blaschko. All the lesions were located on the head or neck. Unilaterally distributed lesions were found in 94.4% of patients. Two patients showed low titers of ANA in a speckled pattern. No systemic involvement or progression to systemic LE was noted. The patients were clinically diagnosed as pigmented lichen planus (55.6%), pigmented linear discoid lupus erythematosus (33.3%), and linear morphea (11.1%) before histopathological examination.



Unilateral, segmental brown macules from the right angulus oris to neck



Hyperkeratosis, follicular plugging, vacuolar basal cell degeneration, and perivascular and periadnexal infiltration in dermis

Conclusion

A group of 18 patients with pigmented longitudinal discoid lupus erythematosus in China. Clinically, along Blaschko 's lines, pigmented longitudinal discoid lupus erythematosus presents as brownish macules. Clinically difficult can be the differentiation between pigmented linear discoid lupus erythematosus and other linear dermatoses such as pigmented linear lichen planus and linear lichen planopilaris, but histological details can help to distinguish these different entities. Recognition of such a unusual subtype DLE may have major clinical consequences.

Source: Liu W, Vano-Galvan S, Liu JW, et al. Pigmented linear discoid lupus erythematosus following the lines of Blaschko: A retrospective study of a Chinese series. Indian J Dermatol Venereol Leprol. 2020;86(4):359-365.

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Terbinafine and Itraconazole in Different Doses and in Combination in Tinea Infection: A Randomized Controlled trial with Clinico-Mycological Correlation

Introduction

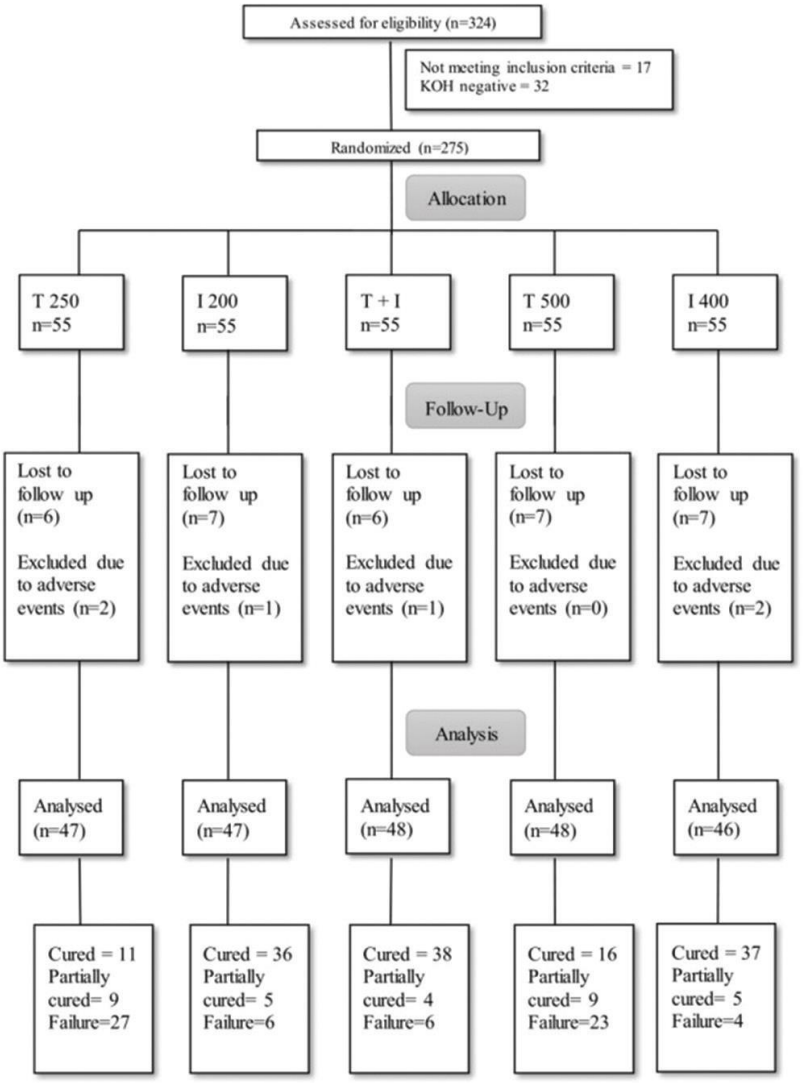
Tinea is a dermatophyte-caused superficial fungal infection that invades and multiplies inside the keratinized tissue (skin, hair, nails). Tinea impacts between 20 percent -25 percent of the world 's population. The prevalence of chronic and persistent dermatophytosis has increased in recent years especially in the tropical countries. There is a big difference between the care needed in the current scenario and the recommendations provided in standard books for care. Particularly in India, there is a lack of original studies that show dermatophytosis as a major danger to both the patient and the treating physician. Terbinafine is a fungicidal product which works by inhibiting the epoxidase enzyme squalene that transforms squalene to lanosterol. Itraconazole is essentially a fungal drug which works by inhibiting the 14-demethylase enzyme. To counter this problem, many dermatologists have started using higher doses and combination antifungal regimens. These regimens were not confirmed however. Therefore, this analysis is to test the widely used systemic antifungal medications, i.e., terbinafine and itraconazole, at various doses and in combination.

Methods

Study design was a randomized parallel group trial. Patients were randomly divided into five parallel arms in which two of the standard drugs in recommended doses were compared with their double doses and with combination of both the drugs. Patients were followed up every 2 weeks. Outcomes were assessed at 4 and 8 weeks. Cure was considered as complete clinical resolution of the lesions. Fungal culture and sensitivity were done by disk diffusion method for all patients. Parametric one-way analysis of variance (F test) and Chi-square test were used for the analysis.

Results

Two-hundred seventy-five patients were included in the study. Itraconazole containing groups showed significantly higher cure rates than terbinafine only groups both at 4 and 8 weeks ($P < 0.001$). Itraconazole containing groups, when compared against each other, were not found to be significantly different. The outcomes between terbinafine only groups were also not significantly different. Cure rates at 8 weeks were found to be greater than that at 4 weeks for all groups which were found to be highly significant ($P < 0.001$).



Conclusion

Itraconazole seems to be more effective than terbinafine. There is no benefit in increasing the dose or using a combination regimen in the treatment of tinea. Prolonged duration of treatment is required for complete cure.

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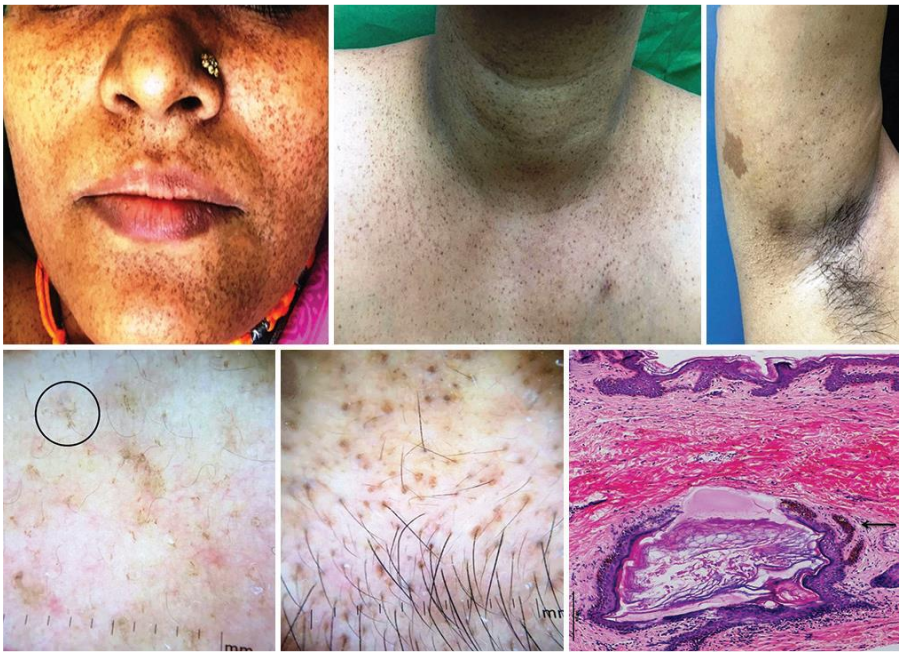
Source: Singh SK, Subba N, Tilak R. Efficacy of terbinafine and itraconazole in different doses and in combination in the treatment of tinea infection: A randomized controlled parallel group open labeled trial with clinico-mycological correlation. Indian J Dermatol 2020;65:284-9.

Dermoscopy of Follicular Dowling–Degos Disease

Case study

A 37-year-old woman had asymptomatic, hyperpigmented lesions on the nose, upper trunk and 12-year flexures. Different lesions occurred in her mum, younger sister, and elder brother. Multiple hyperpigmented macules, 1–3 mm keratotic follicular papules, open comedones, and pitted wounds on her nose, arms, arm, back, and abdomen were present on test. A polarized style dermoscopy utilizing anywhere 10 magnification showed a brown pigmentation in Chinese letter pattern / irregular star form, central brown follicular holes, and comedones. Histopathology of skin biopsy revealed follicular plugging at their tips and sides with elongated, spreading epithelia and inward expansion of infundibular walls with decreased melanisation. There was no presence on the interfollicular epithelium, characteristic of follicular DDD. She was administered oral isotretinoin, contributing to reduced follicular lesions and comedones. The improvement on treatment interruption was, however, partial and reversible.



DISCUSSION

DDD is an autosomal dominant genodermatose with variable penetration, as seen in this study that influenced several members of each unit. It describes the flexures as acquired hyperpigmentation,

starting in adult life. Most patients in this study also started out with a female predominance in the second decade. Due to various genetic defects and variable penetration, genodermatosis may come with a multitude of clinical presentations. Several studies outlined the potential function of follicular pathology in DDD development, including numerous comedo-like lesions, primarily follicular hyperkeratotic papules, correlation with acne, suppurative hydradenitis, etc. Recently, in patients with DDD, Zhou C et al. identified mutation in the secretase subunit of PSENEN encoding presenilin enhancer protein and documented an enhanced sensitivity to acne inversa

The unique features in this study are

(1) early onset of disseminated comedones in adolescence in all three families;

(2) the presence of very few hyperkeratotic follicular papules which became more apparent with dermoscopy and predominantly comedonal lesions;

(3) a predilection for the face, neck, and upper trunk, rather than the extremities;

(4) relative sparing of axilla and groin with only few scattered comedones over these sites;

(5) the absence of classical reticulate pigmentation; and

(6) classical histopathological changes confined to follicular infundibulum.

In this study the atypical interpretation caused us to explore a variety of other differentials. A case of DDD mimicking chloracne reported by Kershenovich et al. Family comedones, family comedones, idiopathic comedones and family comedones disseminated without dyskeratosis both belong to the same class of diseases with identical clinical manifestations. This study highlights the heterogeneity of the disease and need for genetic studies to find out more about this association.

DDD's supervision is tricky. While the DDD lesions are asymptomatic, face involvement is very distressing, increasing the patients' psychological disability. Retinoids have been found ineffective in DDD, and Er: YAG and fractional CO2 are known to improve DDD pigmentation. The patient had predominantly comedones; therefore, oral isotretinoin was initiated and the patient is monitored for long-term safety assessment. To conclude, diagnostic clues for follicular DDD are the presence of follicular papules, comedones and pitted scars along with classical irregular star-shaped/Chinese letter pattern on dermoscopy.

Source: Dabas G, Mahajan R, Afra TP, et al. Dermoscopy of follicular Dowling–Degos disease. Indian J Dermatol 2020;65:290-4.