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:

1. Evaluation of the clinical features of Pigmentation of the fungiform papillae of the tongue
2. Clinical-Pathological Correlation of Novel Dermoscopic Patterns for "Featureless Melanoma"
3. Efficacy of Narrowband Ultraviolet B Vs Broadband Ultraviolet B in the Treatment of Chronic Pruritus- A Randomised, Single-blind, Non-inferiority Study
4. Exclusive and Solitary Facial Porokeratosis- A Case report.

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

Looking forward to your valuable feedback.

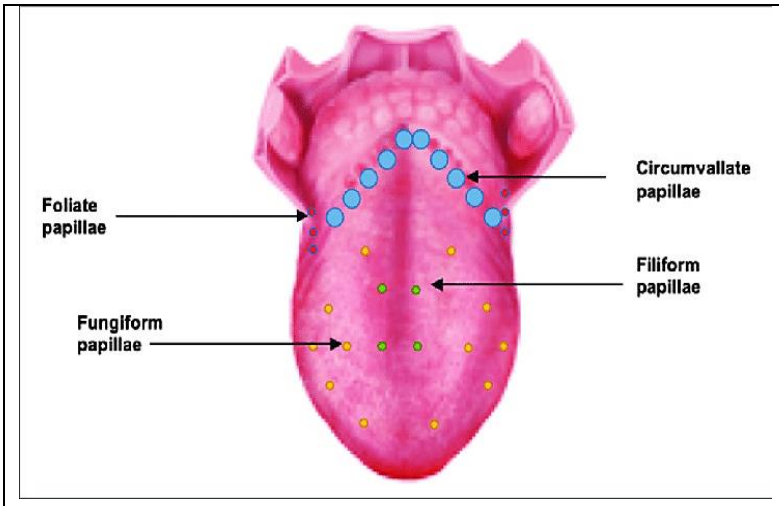
Best Regards,

Medical Team, Micro Labs Limited

1. Evaluation of the clinical features of Pigmentation of the fungiform papillae of the tongue

Introduction

Pigmentation of the fungiform papillae of the tongue (PFPT) is an uncommon idiopathic disorder in which only the fungiform papillae look hyperpigmented. Fungiform papillae are found on the tongue's tip and lateral sections; they may become hyperpigmented alone, looking as mushroom-like structures with a brown or black colour.[1] It seems that PFPT is more prevalent among dark-skinned individuals, while it is rarely recorded in Asian communities with lighter skin tones.[2] PFP is easily diagnosed clinically with a careful naked eye examination, with or without dermoscopy.[1] The purpose of this study was to look at the PFPT's clinical features in a detailed manner.



Papillae of the tongue

Methods

Patients with PFPT were included in this retrospective study. The clinical features of PFPT, as well as dermoscopic findings and comorbidities, were examined. Based on clinical observations of circumscribed pigmentation on the tongue's fungiform papillae, as well as in conjunction with dermoscopic findings, the diagnosis of PFPT has been established. The close inspection was conducted using a dermoscope (Dermlite DL100; 3Gen). Investigations were conducted on dermoscopic features including colour and pattern.

Results

A total of 19 individuals with PFPT diagnoses were included in the study. The ratio of men to women was around 1:5. At diagnosis, the patient was 41.1±17.6 years old on average (range: 8~67 years). Holzwanger's categorization showed that Type I (89.5%) was the most prevalent. The most prevalent PFPT pattern was Type I (17/19, 89.5%) (Fig. 1). Type II and III were discovered in one patient. Pigmentary conditions such as mucosal melanotic macules, Laugier-Hunziker syndrome, melasma, and melanonychia were often seen to coexist with PFPT (6/19, 31.6%). Four patients (21.1%) had inflammatory lesions or prior oral infections, while two patients (10.5%) had systemic and infectious diseases. Seven patients underwent dermoscopic evaluation; frequent findings included widespread pigmentation (cobblestone pattern, 71.4%) and pigmented borders with dichotomized vessels (rose petal pattern, 71.4%).

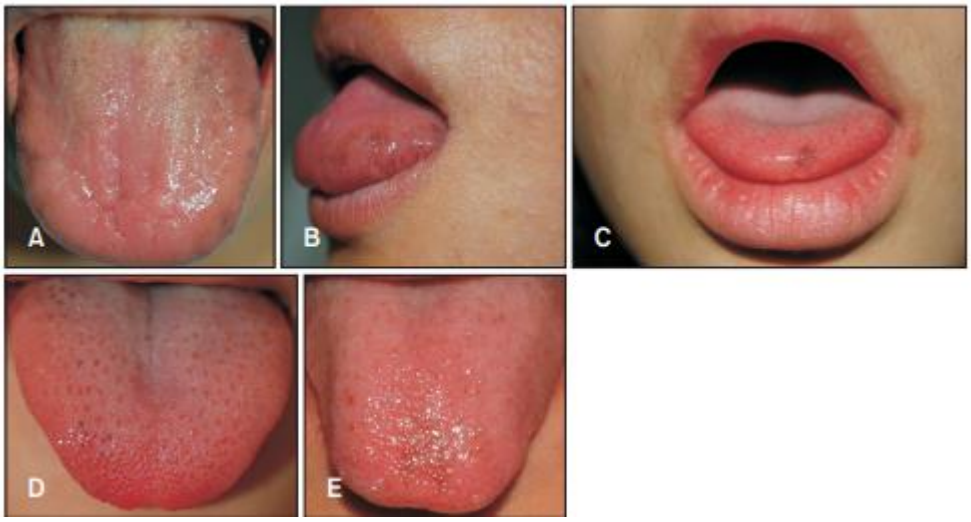


Figure 1. Clinical photographs of PFPT according to Holzwanger's classification. (A~C) Type I PFPT with well circumscribed hyperpigmented patch located on the anterior-lateral aspect or tip of the tongue. (D) Type II PFPT involving several fungiform papillae scattered on the dorsal lingual surface. (E) Type III PFPT showing hyperpigmentation of every fungiform papillae on the dorsum of the tongue. PFPT: pigmented fungiform papillae of the tongue.

Discussion:

PFPT is an uncommon, benign pigmentary tongue disorder. PFPT appears to be more frequent among those with dark skin tone. In seven cases of patients having dermoscopic pictures in this

investigation, five patients (71.4%) had the cobblestone pattern and another five patients (71.4%) had the rose petal pattern, respectively. Of these, three patients (42.9%) had both the cobblestone and rose petal patterns.[2] A recent study by the Surboyo MDC et al. showed that the most prevalent patterns were the cobblestone appearance (47.37%) and the rose petal appearance (52.63%).[3]

Conclusion:

This study showed that pigmentary diseases and PFPT can coexist. Possible causes of PFPT include a predisposition to aberrant pigmentation or a link with sex hormone as demonstrated by concurrent pigmentary disease.

Possible reasons of PFPT include a tendency to abnormal pigmentation or a relationship with sex hormone, as seen by concomitant pigmentary illness.

Reference

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2. Clinical-Pathological Correlation of Novel Dermoscopic Patterns for "Featureless Melanoma"

Introduction

Melanoma is one of the most aggressive types of malignant skin cancer, caused by altered and aberrant neural crest-derived melanocytes that are mostly found in hair follicles and the basal layer of the epidermidis, as well as in the meninges, choroid, and mucosal surfaces. It makes up around 3% of all skin malignancies detected annually.[1] There are various clinical subtypes of melanoma that have different molecular profiles, presentations, and demography. The most prevalent form of cutaneous melanoma is superficial spreading melanoma (SSM), which is more frequent in fair-skinned people. SSM has a low Breslow thickness and often has a favourable prognosis, however this also relies on how quickly it is detected. Dark-skinned races are more prone to develop acral lentiginous melanoma, which develops from the glabrous skin of the palms, soles, and nailbeds. Melanoma can also develop from mucosal or uveal tissue, which is uncommon and unlikely to be caused by sun exposure. Over 50% of individuals with uveal melanoma progress to stage IV illness, which has a very bad prognosis.[2] The ABCDE criteria (Asymmetry, Border, Colour, Diameter, Evolving) only gives 64% accuracy, pointing out the need for further diagnostic techniques. The 7-point checklist score is a useful method for dermoscopy. Melanoma diagnosis can be challenging due of its phenotypic and histological variability.[1] The purpose of the study was to describe the varied dermoscopic characteristics and their histological association in order to enhance the detection of featureless melanoma (scoring 0–2 on the 7-point checklist).

Methods

All melanomas excised based on clinical and/or dermoscopic findings were included in the study samples. All lesions were photographed using digital dermoscopy at the dermatology department prior to excisional biopsy. This study only included lesions that had been determined to be melanoma and had high-quality dermoscopic pictures. Single dermoscopic and histological characteristics were taken into consideration for lesions with a score of 2 or below and a diagnosis of melanoma (equivalent to dermoscopic featureless melanoma) after clinical and dermoscopic examination of the 7-point checklist score.

Results

A total of 691 melanomas were retrieved from the database after meeting inclusion criteria. 19 "negative-featureless" melanomas scored between 0 and 2, 194 lesions scored between 3 and 4, and 478 lesions scored between 5 and 10 were found using the 7-point checklist examination. With a score range from 0 to 2, 8t melanomas did not display any positive dermoscopic hint, 3 had a score of 1, and 8 had a total score of 2. The sole positive criterion in the population with a score of 1 was irregular dots and globules (100%). In the population score 2, the unusual network was the most common characteristic (75%), followed by irregular dots and globules (25%).The most common characteristics in the population with a 7-point checklist score of 3 were irregular dots and globules (84%) and abnormal network (72%), followed by irregular diffuse pigmentation (16%), regression pattern (12%), and blue-whitish veil (12%) (Table 1).

Dermoscopic features	Score 3
Atypical network	18 (72%)
Blue-whitish veil	3 (12%)
Atypical vessels	2 (8%)
Irregular diffuse pigmentation (blotches)	4 (16%)
Peripheral streaks and/or pseudopods	1 (4%)
Irregular dots and globules	21 (84%)
Regression pattern	3 (12%)
TOT	25

Table 1. Frequencies of dermoscopic features in lesions with 7-point checklist score 3.

Discussion

This study included 19 difficult-to-diagnose melanomas in which just dermoscopic assessment could not be used to make a diagnosis. Anamnesis, the ugly duckling signs, the signature naevus concept, and clinical-dermoscopic follow-up are all important aids in improving melanoma sensitivity and specificity. About three-quarters of the melanoma cases with score 2 had a reticular pattern, whereas the other two lesions had globular patterns with extra regression patches and irregular blotches, respectively. This was an in situ melanoma that arose on a compound nevocytic naevus and had an inverted network as an extra characteristic. In the other two cases, prominent skin markings (linear hypopigmented furrows with an intersecting pattern) were discovered.[1] According to Lallas A et al., the last dermoscopic finding can assist distinguish between an early or in situ melanoma and a benign naevus, especially on sun-damaged skin.[3]

Conclusion:

Dermoscopy is still the most accurate means of detecting melanoma. Because of the algorithm's scoring structure and the decreased number of elements to recognise, the 7-point checklist simplifies ideal pattern analysis.

The best method for identifying melanoma is still dermoscopy. Due to the scoring-based methodology and the smaller number of variables to identify, the 7-point checklist offers a simplification of traditional pattern analysis.

Reference

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3. Efficacy of Narrowband Ultraviolet B Vs Broadband Ultraviolet B in the Treatment of Chronic Pruritus- A Randomised, Single-blind, Non-inferiority Study

Introduction

Chronic pruritus (CP) or pruritus lasting more than six weeks, has a lifetime frequency of 22% in the general population and affects more than 50% of patients with skin diseases.[1] Chronic pruritus (CP) has a significant negative influence on a patient's quality of life and is a symptom of several aetiologies. The brain is also involved in pruritus, and mapping of a pruritus matrix in healthy volunteers and patients with CP revealed comparable but distinct neural networks for pruritus and pain. The uncertainty over the neurophysiological processes causing CP is one of the causes for the present inadequate therapy of people with CP.[2] UV phototherapy, or treatment with ultraviolet (UV) light, has long been recognised to be useful in the treatment of pruritic skin illnesses such as psoriasis, atopic dermatitis (AD), and mycosis fungoides. Broadband ultraviolet B (BB-UVB) has almost entirely been replaced by narrow-band ultraviolet B (NB-UVB) in phototherapy equipment and private dermatology practises for the treatment of different skin conditions. NB-UVB has not been compared to BB-UVB in terms of lowering pruritus in people with CP.[1] The current study aimed to compare the efficacy of NB-UVB and BB-UVB in decreasing pruritus in patients with CP, as well as to determine if NB-UVB is less effective than BB-UVB in a non-inferiority trial.

Method

This randomised, single-blinded, non-inferiority study compared the effects of narrowband ultraviolet B to those of broadband ultraviolet B. Broadband-UVB or narrowband-UVB was administered to patients with chronic pruritus three times per week for six weeks while the clinical response was recorded before and after each week during and at the end of the 6-week treatment course. The primary outcome was to assess patients' mean pruritus during the previous week using a visual analogue scale (VAS) ranging from 0 (no itch) to 10 (worst possible irritation). While the secondary outcome was patients rated their sleep disruption over the previous week on a scale of 0 (no sleep disturbance) to 10 (worst sleep disturbance). Also, the researchers rated skin excoriations on a 4-point scale (0–3). The treatment impact was measured as the percentage change after 6 weeks compared to the pre-treatment state. The Wilcoxon-Mann-Whitney test was used to assess group differences.

Results

Data from 39 individuals with CP who had at least one UV treatment session were assessed. Twenty patients received NB-UVB treatment, whereas 19 had BB-UVB treatment. Broadband-

ultraviolet B and narrowband-ultraviolet B both demonstrated strong antipruritic efficacy (itch reduction of 48% and 66.4%, respectively). During the treatment period, 1 (2.6%) patient in the BB-UVB therapy group experienced minor regional erythema. BB-UVB decreased pruritus from a mean (±SD) of 6.13± 2.35 to a mean (±SD) of 2.75 ±2.28. NB-UVB decreased pruritus from a mean of 6.09± 2.81 to a mean(±SD) of 2.42 ±2.93. Reduced sleep disruption from BB-UVB VAS decreased from mean (±SD) 3.28 ± 3.31 to mean (±SD) 1.16 ± 2.45. The mean sleep disturbance VAS was decreased by NB-UVB from mean (±SD) 4.1 ±3.06 to 1.73± 2.85. Excoriations were decreased by BB-UVB from a mean (±SD) of 1.25± 0.85 to a mean (±SD) of 0.78± 0.47. The severity of excoriations was reduced by NB-UVB from mean (±SD) 1.59± 0.62 to mean (±SD) 0.90 ±0.43. Narrowband-ultraviolet B was shown to be no worse than broadband-ultraviolet B in treating pruritus in patients with chronic pruritus, assuming a 20% non-inferiority margin (Figure 1).

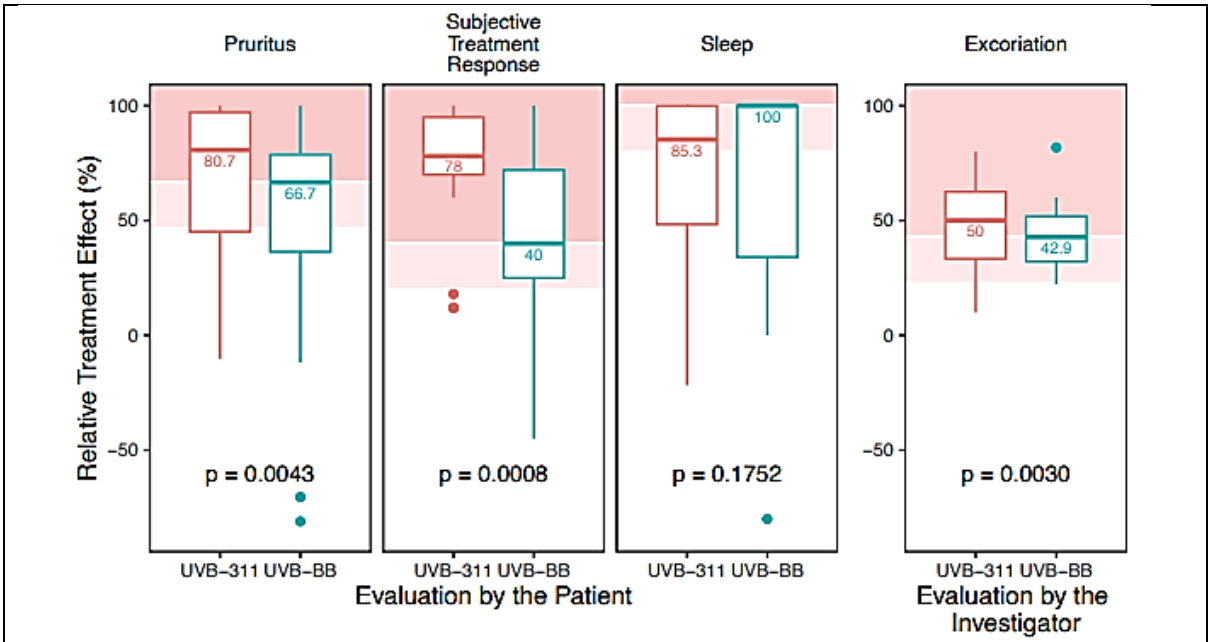

Figure 1. Comparison of narrow-band ultraviolet B (UVB)311 and broadband ultraviolet B (BB-UVB) before and at 6 weeks' treatment.

Discussion:

For many years, UV phototherapy has been utilised as a successful treatment for a variety of irritable skin conditions. At present, NB-UVB is the recommended phototherapy treatment option and it has demonstrated that it works better than BB-UVB to treat psoriasis, AD, and

other pruritic skin conditions. In the current study, the BB-UVB and NB-UVB therapy groups obtained a mean difference in change from baseline pruritus of -3.4 and -3.7 on the VAS during a 6-week period, respectively.[1] In an 8-week trial by Ständer S et al evaluated the safety and effectiveness of the neurokinin 1 receptor antagonist serlopitant in treating CP, individuals receiving serlopitant saw a mean reduction in pruritus from baseline of -1.6 on the VAS (0–10).[3]

Conclusion:

The minimal amount of acute side effects, limited number of contraindications, and simplicity of conjunction with other treatment modalities make narrow-band ultraviolet B (NB-UVB) phototherapy a good option for treating Chronic pruritus (CP) of various causes.

methods.

Reference:

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4. Exclusive and Solitary Facial Porokeratosis- A Case report

Introduction

Porokeratosis is a rare group of acquired or hereditary skin illnesses with uncertain cause that are marked by abnormal keratinization. There have been numerous clinical variants identified, each with a distinct form, distribution, and clinical history.[1] Porokeratosis comes in localized forms like porokeratosis of Mibelli, linear porokeratosis, and punctate porokeratosis as well as dispersed forms like actinic superficial disseminated porokeratosis and porokeratosis plantaris, palmaris et disseminata. Porokeratosis typically affects the trunk and extremities, but rarely the

face.[2] This case study presents a 52-year-old Caucasian woman with a 2-cm single, keratotic lesion on her left cheekbone that has been present for 11 months.

Case Presentation:

A 52-year-old Caucasian woman was presented with an 11-month history of a 2-cm single, slowly developing keratotic lesion on her left cheekbone (Figure 1a). An ectatic vascular cluster, a peripheral keratotic ridge, and a central furrow with scar-like patches were all seen during a dermoscopy examination (Figure 1b). Her personal medical history was unremarkable, and the remaining anatomical regions that were checked revealed no additional skin abnormalities. A punch biopsy was done on the perimeter of the lesion and a second biopsy was done in the center furrow because of the unusual clinical presentation. Histological analysis in both cases revealed epidermal hyperplasia with many, well defined cornoid lamella along with attenuated granular layer and sporadic dyskeratotic cells in the spinous layer. A mild lymphocytic infiltration, fibrosis, and altered collagen bundles were visible in the superficial dermis. A topical 5-fluorouracil treatment for facial porokeratosis has been established after the diagnosis, but no improvement has been seen. As a result, startedd a new treatment for 16 weeks with topical isotretinoin 0.05% cream, and the cutaneous lesion improved slightly.

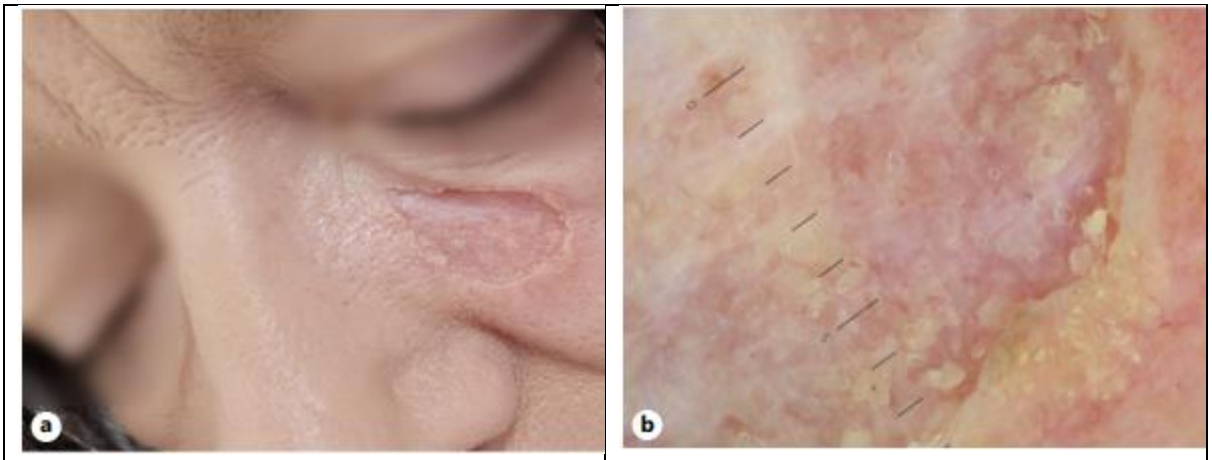

Figure 1. a Slowly growing solitary, keratotic lesion on the left cheekbone. b Dermoscopy examination showed a central furrow with scar-like areas, a peripheral keratotic ridge, and scattered ectatic vessels.

Discussion

In 15% of patients with diffused superficial actinic porokeratosis, facial lesions may develop. Porokeratosis' etiology is still unknown, despite the existence of a number of theories.[2] The development of porokeratosis may be impacted by a person's genetic composition; numerous genetic loci as well as genes involved in epidermal differentiation have been discovered. Since most of them located in places that are exposed to the sun, UV exposure may also play a part in the etiology. Additionally, immunosuppression, cancer, human immunodeficiency virus infection, HCV, medications, and inflammatory and/or autoimmune illnesses have been linked to porokeratosis.[1] Further, in a single case report, a potential connection to HPV type 16 infection was previously mentioned.[3]

Conclusion

Porokeratosis is a benign cutaneous disease, but malignant change has been seen in 6.9–11.9% of cases with persistent lesions of size more than 1 cm. Porokeratosis treatment is frequently difficult, frequently yielding unsatisfactory outcomes, and frequently causes patients to feel more uncomfortable. As treatment possibilities, the carbon dioxide laser, 5-fluorouracil, dermabrasion, topical, and systemic retinoids have been recommended. As the face might be the site of presentation of this entity, doctors need to be aware of this uncommon porokeratosis expression.

For the management of Porokeratosis, carbon dioxide laser, 5-fluorouracil, dermabrasion, topical, and systemic retinoids have been recommended.

Reference

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