

Dermoscopy of Hailey-Hailey disease : A case report

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Introduction & Objectives: Hailey-Hailey disease (HHD) also known as benign chronic pemphigus** is a rare acantholytic autosomal dominant dermatosis. HHD is due to a mutation in the ATP2C1 gene that interfere with the intracellular calcium pump mechanism resulting in loss of keratinocytes adhesion. Clinically HHD presents as flaccid vesiculopustules and bullae which rupture easily leaving macerated or crusted erosions affecting symmetrically flexural areas. As the differential diagnosis of HHD may include various skin diseases , dermoscopy may assist clinical examination . We herein report the dermoscopic features of HHD in a patient.

Materials & Methods: One patient was included. Dermoscopy was performed using FotoFinder (contact non-polarized dermoscopy).

Results: A 62-year-old female patient with history of diabetes mellitus , hypertension ,dyslipidemia and palmoplantar psoriasis presented with six month history of painful relapsing intertrigo affecting the skin folds worsened by sweating .The same symptoms were reported in the patient's father and two daughters. Dermatological examination showed multiple erythematous , macerated and symmetric plaques with superficial linear fissures and erosions. Thick whitish scales were noticed at places. The lesions were located on the axillary , inframammary , inguinal and suprapubic folds. The nails , hair and mucous membranes examination was normal. Dermoscopy showed a pink -whitish or pink -yellowish background with cloud -like white areas separated by pink furrows in places as well as white scales and erosions. A polymorphous vascular pattern was noticed : branched , glomerular and coiled vessels . In places, the vessels had a linear arrangement, parallel to the furrows . Histopathological examination showed an epidermis centred by a bulla with a diffuse suprabasal epidermal clefting and acantholytic cells giving a dilapidated brick wall appearance. The dermis showed a dense inflammatory infiltrate. Direct immunofluorescence was negative . These arguments were consistent with the diagnosis of HHD. The patient was treated with topical corticosteroids , topical vitamin D analogs and ultraviolet B therapy with significant improvement. Dermoscopy was performed after treatment showing a light-brown background with polymorphous vessels . The erosions ,scales and cloud-shaped white areas disappeared .

Conclusion: To our knowledge** , dermoscopic features of HHD were first reported in 2017 by Kelati and al in a 60-yearold patient then in only few cases .All cases described the same dermoscopic findings : irregular pinkish white areas separated by pink furrows along with white areas in

a cloud -like arrangement . Small erosions, ulcerations and crusts were also occasionally visible. Oliviera and al reported the presence of polymorphous vessels, including glomerular , linear-looped vessels and coiled vessels, randomly arranged over a pink-whitish or pink-yellowish background, with a predominant peripheral distribution found in half of the patients. Our dermoscopic findings were consistent with the previously described cases. The linear and parallel to furrows distribution of the vessels seen in our case has not been described in other reports.

In conclusion , dermoscopy is a non- invasive useful tool that allows to identificate the characteristic combination of white and pink areas assisting the early diagnosis of HHD .



Dermoscopy of familial porokeratosis: 6 case series

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Introduction:

Porokeratosis is an epidermal keratinization disorder characterized clinically by keratotic rim which represent coronoid lamella histologically and whitish peripheral rim dermoscopically. Dermoscopy of central area visualized as reddish-brown globules and dots, which corresponds to melanophages and dilated capillaries in the dermis. Among 5 clinical variants, DSAP caused by mutation of the mevalonate kinase (MVK) gene on chromosome 12q24 while porokeratosis of Mibelli (POM), caused by A splicing mutation in phosphomevalonate kinase (PMVK), involved in the cholesterol biosynthetic pathway.

Objectives:

To describe the dermoscopic features of POM and DSAP and their differences.

Materials & Methods:

We screened two family consist of 4 members and 2 members respectively attending tertiary center in our hospital. They all subjected to history, clinical examination, dermoscopy and biopsy.

Results:

We report six-cases in two families: Family I [23-years female biopsy-proven porokeratosis, two siblings and mother] with clinical diagnosis of porokeratosis of mebelli (POM). Dermoscopy of keratotic rim shows double-wall scaly border, white halo, dark-brown globules, yellow globules, arborising telangiectasia and structureless white area with unfocused vessels. Centre shows yellow globules, structureless hypopigmented area, eccentric zig-zag dark brown streaks and globules, and new findings as small keratotic rim within large keratotic rim with blood spot. Family II [35-years female biopsy-proven porokeratosis, mother] with clinical diagnosis of disseminated superficial actinic porokeratosis (DSAP), and dermoscopy shows keratotic rim as tram-track hyperpigmented line, globules, scaling, moth eaten border while central-part shows homogenous white area, multiple yellow clods and new findings as vellus hair at yellow globules, telangiectasia and keratotic plugs.

Histopathology examination in both family shows similar findings as moderate dense superficial perivascular patchy lichenoid lymphocytic infiltrate with focal interface vacuolar changes in two small foci the epidermis shows an invagination of the floor which lacks granular layer while wall shows hypergranulosis. Rising from the center of this invagination is a column of parakeratotic cells (cornoid lamella). Occasional dyskeratotic cells can be seen at the bottom of this parakeratotic column.

Conclusion:

Our dermoscopy findings of POM, are in full agreements with Jha et al and Zaar et al except blood spot and darker spotted pigmentation are in centre of plaque. Subsequently, ours dermoscopic findings of DSAP, are in partial agreements with Nicola et al, Zaar et al and Zhang et al. In Zaar et al study, dermoscopic findings in POM and DSAP are similar except for fewer blood spots or erosions along the keratin rim and more light-brown pigmentation within the keratin rim in DSAP.** Our findings show a bit difference, as keratotic rims visualized as white halo, structureless white area along with telangiectasia in POM vs moth-eaten border in DSAP. Central area shows yellow clods in both variants, along with another

keratotic rim with blood-spot, hypo and hyper-pigmented area in POM vs keratotic plug and vellus hair centred at yellow globules. In conclusion, we added new dermoscopic findings and it helps to differentiate between POM and DSAP types of porokeratosis.



Rainbow phenomenon on dermoscopy examination - where do we expect it?

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Introduction & Objectives: Pink lesions are usually difficult for correct diagnosis only by clinical and dermoscopic evaluation, therefore biopsy and pathohistological evaluation are often needed. The objective is to examine the clinical and dermoscopic features of these lesions and correlate them with the histopathological findings.

Materials & Methods: We present four cases of pink lesions that were clinically and dermoscopically analysed. Case 1 involves a 38-year-old female with a submammary growing lesion present for three months. Case 2 involves a 41-year-old male on antiretroviral therapy for HIV with four lesions on the extremities present for four months. Case 3 involves a 42-year-old male with a lesion on the back present for eight years, showing signs of growth. Case 4 involves a 29-year-old male on antiretroviral therapy for HIV with trunk, upper extremity and palate lesions present for ten months.

Results: In Case 1, the clinical examination revealed a firm palpable pink papule, while dermoscopy showed the presence of the rainbow phenomenon, lacunae and scales. The histopathological examination confirmed the diagnosis of haemangioma. In Case 2, the clinical examination showed flat-topped pink brownish papules. Dermoscopy revealed a structureless pink brownish homogenous area. The histopathological examination confirmed the diagnosis of Kaposi sarcoma. In Case 3, the clinical examination revealed a pink firm nodule. Dermoscopic examination showed the presence of the rainbow phenomenon and lacunae. The histopathological examination confirmed the diagnosis of haemangioma. In Case 4, the clinical examination revealed pink plaques on the body and nodules on the palate. Dermoscopic evaluation showed a structureless pinkish area. The histopathological examination confirmed the diagnosis of kaposi sarcoma.

Conclusion: Based on our findings, it is important to note that not every lesion with the rainbow phenomenon dermoscopically is Kaposi sarcoma. This phenomenon is expected to be pathognomonic for Kaposi sarcoma, which is most often seen in nodular lesions. Therefore, it is crucial to recognize that not every Kaposi sarcoma exhibits the rainbow phenomenon dermoscopically, in particular papules and plaques. Furthermore, every pink nodular growing lesion should be biopsied to exclude malignancy, if not clearly benign clinically and dermoscopically. These findings highlight the importance of a comprehensive clinical, dermoscopic and histopathological evaluation for accurate diagnosis and management of pink lesions.



Pigmented Bowen's Disease: A Mimicker of Melanoma in Skin of Color

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Introduction & Objectives: Pigmented Bowen's Disease (pBD) is a rare variant of in situ squamous cell carcinoma (SCCIS) characterized by an increased melanin pigment in the epidermis and accounts for 1.7% of all SCCIS cases. While it exhibits a higher prevalence among individuals of African descent, the exact prevalence among people with skin of color (SOC) remains elucidated.

Materials & Methods: We describe 4 dermatoscopic lesions found in individuals with skin types 4-5 and were subsequently diagnosed with pBD.

Results: pBD revealed pigmented circles, brown globules, and structureless grey-to-brown pigmentation with radial lines. Dotted/glomerular vessels were only present in one case. All patients underwent a biopsy with a provisional diagnosis of melanoma.

Conclusion: Dermatoscopic features of Bowen's disease are characterized by glomerular/dotted vessels on an erythematous background with scaling, often seen on sun-exposed skin. Few studies have investigated the dermatoscopic features of pBDs, with the most common findings being pigmented circles, angulated lines, dots arranged linearly, and coiled/prominent serpentine vessels. In our cases, we didn't observe the presence of vessels as a hallmark feature as reported in the literature. Diagnosing pBDs can be challenging, as they are frequently mistaken for melanoma during clinical assessments. Defining dermatoscopic patterns specific to SOC may enhance diagnostic accuracy. Lack of scaling or previously described dermatoscopic vascular patterns shouldn't deter consideration of pBD. Further research is needed to define the dermatoscopic features of pBDs in individuals with SOC, which can ultimately lead to improved patient outcomes.





Trichoscopic aspects of scalp psoriasis

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Introduction & Objectives: Scalp involvement is very common in psoriasis, being present in up to 80% patients. The clinical presentation is variable, ranging from minimal scaling to thick plaques covering the whole scalp. Trichoscopy represents the dermoscopy imaging of the scalp and hair. Structures which may be visualised by trichoscopy include hair shafts, hair follicle openings, perifollicular epidermis and cutaneous microvessels. The objective of this study is to evaluate the trichoscopic features of scalp psoriasis.

Materials & Methods: A case-control study was conducted and all patients were from Department of Dermatovenereology, University Clinical Centre Sarajevo. Fifty patients with scalp psoriasis and 37 healthy subjects were enrolled in this study. Tririchoscopic evaluation of whole scalp was performed using a videodermatoscope. The data were statistically evaluated.

Results: The age of the patients having scalp psoriasis varied from 14-72 years. Female male ratio was 29/21. The patients had mostly type II Fitzpatrick's skin phenotype. Family history was positive for psoriasis in 28 of 50 (%) patients. The duration of psoriasis ranged from 10 to 180 months. Common trichoscopic findings of scalp psoriasis were red dots and globules, red globular rings, and whitish scales on a light red background (p< 0.05).

Conclusion: Our study has shown the significances of trichoscopy of patients with scalp psoriasis. Regular clinical and trichoscopical follow-ups are very important to monitor disease activity and treatment tolerance.



New-onset mucosal melanosis mimicking mucosal melanoma in a skin of color patient

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New-onset mucosal melanosis mimicking mucosal melanoma in a skin of color patient

Introduction & Objectives: Mucosal melanosis (lentiginosis, labial melanotic macula) is a benign pigmented lesion that can occur in both the genital and the oral mucosa, characterized by pigmentation of the basal keratinocytes with normal melanocyte counts in histology. Mucosal melanosis may mimic mucosal melanoma, thus creates a concern for both patients and physicians. Dermatoscopic examination plays an important role in the diagnosis of both entities. Here, we present a case of mucosal melanosis, which clinically showed concerning features of mucosal melanoma including blue gray pigmentation and vascularization under dermatoscopy and discuss the importance of clinicopathological correlation.

Materials & Methods: A 56-year-old woman came to dermatology clinic with new onset lower lip pigmentation present for 4 months. The lesion was examined and clinical and dermatoscopic images have been recorded. In order to confirm the diagnosis, the patient underwent partial shave removal of the lesion.

Results: A healthy 56-year-old woman with Fitzpatrick 4 skin type presented for the evaluation of hyperpigmentation of the lower lip that had been increasing in size for 4 months. The patient also reported occasional bleeding on the lower lip area with mild discomfort due to appearance of the lesion. Her past medical history was not significant, and she did not have a family history of mucosal or cutaneous melanoma. She did not have any other pigmented lesions on the body and was not on any other medications that might induce skin pigmentation. Additionally, the patient had no history of trauma, dental procedures, smoking or drugs. Physical examination revealed black and brown hyperpigmented areas with irregular borders on the mucosal surface of the lower lip. Dermoscopic evaluation revealed black and brown irregular blotches and negative pigment network with dotted vessels with grayish discoloration in a very heterogenous lesion on the lower lip mucosa. A partial shave biopsy was taken from the lower lip, which demonstrated lip mucosal epithelium with basal layer hyperpigmentation and sparse melanophages and no melanocytic proliferation. Based on the clinical, histopathologic, and dermoscopic findings our patient was diagnosed with oral mucosal melanosis.

Conclusion: Dermatoscopic examination plays a significant role to distinguish mucosal pigmented lesions. The combination of blue, gray, or white color with structureless background are the strongest indicators of mucosal melanoma. However, as seen in the current case, dermatoscopic characteristics may be deceptive, considering the different clinical manifestations in skin of color. In the current case, we observed, black-brown heterogenous pigmentation along with increased vascularization, which was very worrisome for a preliminary diagnosis of melanoma. The awareness of various clinical and dermatoscopic features of mucosal melanosis in different skin tones are very important and further studies evaluating mucosal pigmentations in skin of color population.



Phenotypic and Dermoscopic Patterns of Familial Melanocytic Lesions: A Pilot Study in a Third-Level Center

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Introduction & Objectives: : Cutaneous melanoma is a highly aggressive skin cancer. It is estimated that 5% to 10% of the underlying mutations are hereditary and responsible for familial (or hereditary) melanoma. These patients are prone to the early development and higher risk of multiple melanomas. In recent years, an increasing number of genes have been identified thanks to genetic testing, allowing the subsequent surveillance of individuals at risk, yet it is still difficult to predict the presence of these mutations on a clinical basis. In this scenario, specific phenotypic and dermoscopic features could help clinicians in their identification.** The aim of this work has been to focus on the clinical and dermoscopic patterns of familial melanomas and phenotype patients who tested positive for predisposing genetic mutations, with an attempt to correlate specific mutations to prevalent dermoscopic patterns, paving the way for reference models useful in clinical practice

Materials & Methods: The Genetics of Familial Melanoma Clinic at the University of Turin was established to study and optimize the prevention of hereditary melanomas. Patients who met the criteria according to the 2020 Italian Association of Medical oncology (AIOM) guidelines for the melanoma genetic investigation were analyzed. The gene examined by next-generation sequencing (NGS) were: ACD (adrenocortical dysplasia homologue), BAP1 (Breast Cancer gene 1 Associated Protein 1), CDKN2A (Cyclin Dependent Kinase Inhibitor 2A, exons 1 alpha, 2 and 3), CDK4 (Cyclin Dependent Kinase 4, exon 2), MC1R (Melanocortin 1 Receptor), MITF (Microphthalmiaassociated transcription factor, exon 9), POT1 (Protection of telomeres protein 1), TERF2IP (Telomeric repeat-binding factor 2-interacting protein 1), and TERT (Telomerase reverse transcriptase).

Results: In our cohort, out of 115 patients referred to genetic counseling for melanoma, 25 tested positive (21.7%) for critical mutations: CDKN2A (n = 12), MITF (n = 3), BAP1 (n = 1), MC1R (n = 3), PTEN (n = 1), TYR (n = 2), OCA2 (n = 1), and SLC45A2 (n = 2). The phenotype profiles obtained through the digital acquisition, analysis, and description of both benign and malignant pigmented lesions showed a predominance of the type II skin phenotype, with an elevated mean total nevus number (182 moles, range 75–390). As for dermoscopic features, specific mutation-related patterns were described in terms of pigmentation, areas of regression, and vascular structures

Conclusion: Although further studies with larger cohorts are needed, our work represents the beginning of a new approach to the study and diagnosis of familial melanoma, underlining the importance of clinical and dermoscopic patterns, which may constitute a reference model for each gene, enabling comparison



A rare presentation of breast cancer cutaneous metastasis presenting as neoplastic alopecia: A report with dermatoscopic findings

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Introduction & Objectives: A rare manifestation of scalp metastasis is neoplastic alopecia (NA), which resembles cicatricial alopecia. It is important for dermatologists to recognize NA, as it has the potential to allow for the early detection of breast cancer.

Materials & Methods: Herein, we present a 53-year-old female patient with alopecia and scalp pruritus, later found to be cutaneous metastasis of underlying breast carcinoma, with typical features of NA. We report clinical, dermatoscopic, and pathological findings of her case.

Results: A 53-year-old female presented to our medical center with hair loss and scalp pruritus for the past year. Examination revealed cicatricial alopecic plaques without erythema on the midline scalp, as well as a positive hair-pull test. The patient was diagnosed with cicatricial scalp alopecia and injected with 5mg/mL intralesional triamcinolone acetonide (ILTAC) into the scalp. She started on 0.05% clobetasol solution and 2% ketoconazole shampoo.

At the patient's 6-week follow-up, she reported worsening hair loss, scalp irritation, and new systemic symptoms including breathlessness, joint pain, and weight loss. Affected areas were treated with ILTAC in clinic, and she continued on her current treatment regimen.

Three months following the initial presentation, she was diagnosed with stage IV peritoneum lobular breast cancer (ER+/PR+/HER2(1+)) with metastasis to ovaries and began on abemaciclib. Physical examination showed scarring alopecia involving the midline frontal scalp with mild erythema. Dermatoscopic examination showed a mildly erythematous background with telangiectasias and white lines with the total loss of follicular orifices. Histopathologic examination revealed dermal infiltration of atypical epithelial cells arranged in cords between fibrotic stroma. Immunohistochemically, the cells were positive for cytokeratin 7 and estrogen receptor, while CK20, S100, and CD68 were negative, consistent with metastatic lobular breast cancer.

Conclusion: Breast cancer is the most common cancer among women and the most common cancer to metastasize to the skin. NA is almost always associated with breast cancer and can sometimes be the first sign of malignancy. However, NA often goes undiagnosed if mistaken for benign cicatricial alopecia. As was the case in our patient, pathological characteristics of NA reveal neoplastic cells consistent with the patient's breast cancer subtype.

In summary, dermatologists should be aware of the clinical and pathological features of NA and maintain a low threshold for biopsy in patients presenting with atypical scarring alopecia unresponsive to standard treatments. This is particularly important for women aged 40-80, patients with a history of breast cancer, or those presenting with systemic symptoms.



Ultraviolet-induced fluorescence dermatoscopy in general dermatology – What do we know so far? - A review of the literature and a single center observations.

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Ultraviolet-induced fluorescence dermatoscopy in general dermatology – What do we know so far? - A review of the literature and a single center observations.

Introduction & Objectives:

The recent advances in noninvasive skin imaging techniques enable new devices to be helpful tools in facilitating a correct diagnosis. Recently, the new dermatoscopic devices combine the ability to examine the skin lesions at 10x magnification in polarized, non-polarized and then UV mode. They are non-invasive diagnostic modalities which allow observation of UV-induced fluorescence of skin chromophores. Their workflow is based on a phenomenon called Stokes shift which uses the visible light spectrum of light that originates from the fluorochromes emitting UV-excited luminescence.

Ultraviolet-induced Fluorescence Dermatoscopy (UVFD) is a recently explored, novel technique. There are many different possible indications for its use in general dermatology, trichoscopy, onychoscopy and dermatooncology.

Materials & Methods:

We conducted a literature review and summed up our personal observations on this new method.

Results:

According to aetiologic factor, UVFD can produce wide spectrum of fluorescence on the glabrous skin and skin of the scalp, including appendages, whereas in disorders of skin keratinization the scales can be responsible for formation of blue-white or bright fluorescence. The results are summarized in Table 1.

Conclusion:

UVFD can be a new, auxiliary tool which is very useful in every day clinical practice and may facilitate the diagnosis in common skin diseases. The special emphasis of UVFD should be focused on treatment monitoring in infectious skin diseases where the follow up can be done non-invasively, without the necessity to take samples. Contrary to a well-known Wood's lamp, UVFD is a convenient device which does not require any external source of energy. Moreover, due to a possibility to switch between polarized and UVFD mode, a complex examination can be done, which is helpful in choosing the right therapeutic modality.

Microsporum spp. Bright green-yellow fluorescence. During treatment follow up - the fluorescence first infection of the hair and foremost disappears at base of the hair shafts, then mid and top of the shaft, and shafts. eventually after complete clearance, is no longer visible.
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Trichobacteriosis Bacterial conglomerates reveal a bright yellow-green excited luminescence along the
axillaris hair shafts with brush-like or feathery appearance.
Pitted keratolysis Pale coral-red pits with a free edge of scale and pale coral-red parallel ridge pattern,
as well as pale coral-red cloos in the ridges
Scaples A pright reliex along with an ovar-shaped diagnostic crue well beyond the deita sign
was observed. The borders of the tunnel showed a white- green reflex in OV mode
and are more visible than in polarized mode. Furthermore, the burrow is supposed to
give a bright reflection.
Pseudomonas UVFD ennances the dermatoscopic examination of the nails— especially when the
aeruginosa discoloration is vaguely seen in polarized light, the green color is more prominent in
the UV light, alongside typical findings for a Pseudomonas infection such as
onycholysis or paronychia.
Pityriasis versicolor Light greenish perifollicular scale in active follicular PV. In achromic PV at seborrheic
site "blackout areas" are suspected locations of the skin deprived of background
pink-orange porphyrin fluorescence, possibly due to antibacterial properties of
azelaic acid produced by Malassezia spp. Dark greenish fluorescence might be seen in
folliculocentric hyperpigmented subtype of PV.
Terra firma forme As keratin emits blue fluorescence in UV light, shiny blue-white polygonal scales
dermatosis arranged in a mosaic pattern are visible in UVFD. The plaques disappear after wiping
the skin with a 70% alcoholic solution, a particularly diagnostic test for this entity.
Acanthosis nigricans UVFD revealed multiple blue dots, perhaps due to association with increased
proliferation of keratinocytes, with a few orange dots concomitant with Cacnes
present in the hair follicles. In some cases, the lesions do not display any fluorescence.
Porokeratoses In Porokeratosis of Mibelli, UVFD presents blue-white, shiny keratotic rim
corresponding to the hyperkeratosis, with a bright shadow if the lesion is thick. The
eccrine ducts are attenuated in UVFD as white, shiny dots. In Disseminated
Superifical Actinic Porokeratosis, a blue-white cornoid lamella can be seen, very
frequently better than in polarized light. It is extremely helpful in monitoring the
treatment – a reduction in the thickness of the rim can be seen. When the rim is
pigmented, sometimes no fluorescence is noticed
Psoriasis Bright red fluorescence can be detected.
Vitiligo Better visibility of a perifollicular pigmentation as well as the border of the lesion in
UVFD light in stable patches. Furthermore, the depigmented and pigmented
junctional area was enriched in UV light. In repigmenting vitiligo reservoirs of
pigment alongside telangiectasias showing enhancement in the UV mode were
present. In active lesions the contrast between perifollicular depigmentation and
scattered borders could be visualized more accurately in UVFD.

Table 1. The applications of

Ultraviolet Induced Fluorescent Dermatoscopy (UVFD) in dermatology



Diagnostic performance of neural networks in dermoscopic assessment of melanocytic lesions: context is critical.

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Introduction & Objectives:

Artificial intelligence holds immense promise as a diagnostic tool for clinicians, particularly in the identification of melanomas among high-risk patients and those with multiple suspicious lesions. In our study, we examine the utility of convolutional neural network models for the diagnosis of melanoma based on dermoscopic images.

Materials & Methods:

We compare a model trained on a dataset that included images from European and American sources (CNN-1) to one that had also been pre-trained on an Australian dataset and was otherwise identical (SMARTI). Dermoscopic images were collected from prospectively recruited cohort of 210 lesions (from 191 patients) suspected to be melanomas from an Australian skin cancer clinic. Each lesion was histologically diagnosed independently by five separate pathologists to establish a ground truth consensus. This was compared to the probability weighted diagnoses from the two AI models.

Results:

The CNN-1 model yielded an area under the receiver-operator curve (AUROC) = 0.682 while SMARTI's AUROC = 0.725. CNN-1 had a specificity of 0.35 (CI 0.27-0.45) and sensitivity of 0.91 (95% confidence interval (CI) 0.84-0.96). Whereas SMARTI demonstrated a specificity of 0.26 (CI 0.19-0.35) at a sensitivity of 0.95 (CI 0.88-0.98). As a sensitivity analysis, we observed a higher inter-rater agreement for lesions correctly classified by SMARTI (Fleiss' Kappa 0.788) relative to lesions misclassified by SMARTI (Fleiss' Kappa 0.406). This indicates that lesions misclassified by the AI model were also divisive for human pathologists.

Conclusion:

These results demonstrate the impact of population relevant training data on the performance of a dermoscopic CNN. Dermoscopic AI models have produced excellent results when analysing large datasets that contain a high proportion of easy to diagnose lesions, but those lesions are not necessarily those that pose the greatest difficulty for clinicians. Our study examined a cohort of lesions biopsied for suspicion of melanoma which often pose a greater challenge for even the experienced dermoscopist. We find that lesions that provoke discordant diagnoses between the 2 AI models were those that provoked disagreement between the pathologists. This highlights the importance of incorporating multiple independent diagnosticians to establish ground truth for training datasets.



Dermatoscopic study of Acquired Dermal Macular Hyperpigmentation(ADMH) in skin of color

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Introduction & Objectives:

Acquired dermal macular hyperpigmentation (ADMH) is an umbrella term that includes disorders clinically characterized by small and large pigmented macules/patches and histopathologically showing an evidence of current or resolved interface dermatitis with pigment incontinence, without clinically significant prior inflammatory phase. The primary objective of the study was to study the occurence of ADMH and to study clinico-histopathologic & dermatoscopic correlation of various disorders presenting as ADMH. Various dermatoscopic patterns for acquired hyperpigmentation is described in fitzpatrick skin types I to III, in this study we aim to find the ways in which ADMH presents in indian population so as to better understand the dermatoscopic patterns in skin of colour.

Materials & Methods:

A cross-sectional, observational study was conducted on treatment naïve patients presenting as ADMH secondary to melasma, riehl's melanosis, exogenous ochronosis, lichen planus pigmentosus, erythema dyschromia perstans, erythromelanosis peribuccale of brocq, acanthosis nigricans of either gender were included over study duration of 2 years after their informed consent. Genetic, drug induced and other forms of post-inflammatory hyperpigmentation were excluded from the study. Dermatoscopic evaluation was done using a hand-held Heine Delta 3.0 dermatoscope in polarized contact mode, and photographs were captured by Apple I phone 11 with Heine Derm app. The statistical analysis was carried out using Statistical Package for Social Sciences (SPSS Inc., Chicago, IL, version 16.0 for Win- dows). Normality of the quantitative data was assessed using appropriate tests. Study was conducted after approval of Institutional Ethics Committee.

Results:

Total of 356 Patients (294 females, 62 males) of ADMH were encountered in the study. The mean age of the study population was 34.85 years (range, 14–63). Females (83%) were found to be more frequently having ADMH than males (17%). Melasma (80%, n=288), Lichen planus pigmentosus (5.3%, n=19), Acanthosis nigricans (4.5%, n=16), 11 patients (3%) of Exogenous ochronosis (3%, n=11), erythema dyschromicum perstans (2.8%, n=10), Riehl's melanosis (1.9%, n=7) was found.

Upon dermatoscopic analysis; It was noted that exaggerated psedoreticular network was most commonly seen in Riehl's melanosis (86%), follow by Lichen planus pigmentosus(69%), and then Melasma (13%), it was absent in erythema dyschromicum perstans. Most common pigment pattern seen on dermatoscopy in melasma was reticuloglobular (52%), hem like pattern (58%) in LPP, irregular Linear pattern (60%) in EDP, and follicular keratotic plug with follicular whitish halo (57%), in RM. Perifollicular involvement is seen in LPP and whereas sparing of perifollicular pigment was seen in Melasma, EDP and RM.

Conclusion:

Dermatoscopic patterns have become increasingly clear and defined in caucasian skin. This study highlights the importance and description of dermatoscopic patterns for diagnosis of ADMH in skin of colour. With global trends of migration, all need to be aware and learn about it. Apart from traditionally included entities in the umbrella term 'ADMH',

there is a need to expand this term and include more entites in it. Correlation of clinical and dermatoscopic severity and role of serial dermatoscopy to monitor treatment response and disease progression is suggested by our study.



Dermoscopic features of primary cutaneous lymphomas

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Introduction & Objectives:

Dermoscopy is a contributing tool in the diagnosis of several dermatological diseases. Its contribution in the diagnosis of primary cutaneous lymphomas (PCL) has been demonstrated in few studies.

The aim of this work is to describe the dermoscopic features observed in PCL.

Materials & Methods:

This is a prospective study, performed between January 2021 and April 2022, including cases of PCL confirmed on skin biopsy and immunohistochemistry hospitalized in the dermatology department of the Ibn Rochd University Hospital or followed up in consultation.

Results:

34 patients were included in this study, including 31 T-type PCL and 3 B-type PCL.

Among the 31 TPCL patients, 25 had classic mycosis fungoides (MF) (79%), 2 poikilodermal MF, 4 pilotropic MF and 2 transformed MF. The vascular pattern was represented by dot-like vessels in 45% of patients, short linear sperm-like vessels (37.5%) and glomerular vessels (16.6%); polymorphic vascularization was noted in 4 patients. Orange-yellow areas were seen in all patients with classic MF; structureless areas were noted in 29% of patients. In poikilodermal MF, polygonal structures with pigmented septa and whitish storiform striae were noted. Ulcerations were found in the 2 cases of transformed MF and dilated follicular orifices in the 2 cases of pilotropic MF.

In patients with B-PCL, we identified a salmon-pink background, arborescent vessels, scales, and white circles in all patients; polymorphic vascularization with dot-like vessels was observed in 1 patient.

Conclusion:

In our study, orange-yellow areas and linear and dot-like vessels were strongly characteristic of classic MF, pigmented septa and whitish streaks characteristic of poikilodermal MF, and dilated follicular orifices characteristic of pilotrope MF.

The identification of dermoscopic features could be very useful in clinical practice for the early diagnosis and management of PCL. For this, further studies are needed.



Does training primary care practitioners in a dermoscopy diagnostic algorithm improve triage of suspected skin cancer? A scoping literature review.

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Introduction & Objectives: Many Western countries are facing a shortage of healthcare professionals, making access to dermatology services more difficult. In many countries the waiting time to be seen by a dermatologist is considerable. At the same time, the incidence of skin cancer has risen steadily over the past 50 years. The usefulness of dermoscopy in the hands of trained operators to enhance the accuracy of skin cancer diagnosis is well established. As such, improving the diagnostic accuracy of primary care practitioners (PCPs) by training them in dermoscopy through brief interventions based on diagnostic algorithms could improve patient care by improving their diagnosis of suspect lesions. In this study we reviewed the published literature to determine whether training PCPs in dermoscopy could improve their diagnostic accuracy.

Materials & Methods: A scoping review of the literature was conducted, focusing on studies published in the period 2003-2023 that assessed the ability of low-experienced PCPs to triage suspicious dermatological lesions using dermoscopic diagnostic algorithms. Regarding outcomes, we focused on quantitative variables relevant to screening practice in general practice, including sensitivity, specificity, referrals to specialists, and unnecessary lesion excisions.

Results: Of the 926 studies initially identified, 13 were eventually selected: 10 cross-sectional observational studies and 3 randomised controlled trials. These were carried out in North America (n = 6), Western Europe (n=4), and Australia. (n=3). There was heterogeneity in the training interventions and the criteria used to assess diagnostic accuracy of PCPs after training, however, all studies showed an improvement in this parameter. The preferred algorithms for training PCPs were the 3-point checklist, the 7-point checklist and the Triage Amalgamated Dermoscopy Algorithm.

Conclusion: This review demonstrates the value of training PCPs in dermoscopic diagnostic algorithms through short courses to improve triage of suspicious lesions. These findings are consistent with the wider literature on dermoscopy and primary care. However, it is still necessary to define a territorial organisation, a precise working framework and limits for PCPs who take on this role. Further research is therefore needed in this area, particularly qualitative research.



from benign to malignancy - one clue in dermoscopy

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Introduction & Objectives:

We present cases of pyogenic granuloma and nodular melanoma, both of which exhibit dermoscopic similarities but diverge in their clinical diagnoses. Certain dermoscopic patterns, encompassing attributes like a reddish homogeneous area, a white collarette and the presence of white rail lines, can be useful in the recognition of pyogenic granuloma. Despite its benign nature, this lesion can be a simulator of melanoma and other tumours. This case shows the necessity of adopting a histological diagnostic approach in instances when melanoma cannot be ruled out.

Materials & Methods:

We report cases of two female patients, aged 25 and 44, respectively, to illustrate pyogenic granuloma and nodular melanoma.

Results:

The first patient, a 25 – year – old woman, presented with a fast growing, bleeding lesion on her back. The lesion was detected approximately 2,5 weeks prior to the visit. On physical examination, about 1,2 cm in size, red exophytic bleeding node was noted in the central region of the back. The patient denied any history of trauma in that area, familial occurrences of skin cancer or childhood sunburns. Dermoscopic examination revealed erythema, polymorphic vessels, and a surrounding yellow collarette. The surgical excision was done to remove the lesion, which histologically was identified as pyogenic granuloma.

The second patient, a 44 – year – old woman, who came to our hospital due to a rapidly enlarging bleeding lesion on her back three months before the visit. Clinical examination revealed an erythematous node measuring approximately 2 cm. Dermoscopy exhibited polymorphic vessels and erythema. Similar to the first case, the patient had no family history of skin cancer or childhood sunburns. The lesion was surgically removed and histologically identified as ulcerated nodular melanoma pT3b (III invasion level according to Clark and 3,8 mm Breslow Depth).

Conclusion:

Even though both lesions shared characteristics of rapid growth, bleeding, location on the same body site, similar objective appearance and dermoscopic features such as polymorphic vessels, one lesion was benign while the other – malignant. The subtle distinction was yellow collarette, which corresponds to the attached hyperplastic epithelium enveloping the periphery of the pyogenic granuloma. The presence of vascular structures in a red tumor resembling pyogenic granuloma indicates that melanoma should be ruled out and emphasizes the urgency of prompt histological confirmation in such cases.



Onychoscopy Findings in Hemodialysis Patients

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Introduction & Objectives:

Nail manifestations (NM) observed in chronic kidney disease (CKD), particularly during the hemodialysis stage, exhibit diversity. However, onychoscopic data remain scarce.

The objective of this study is to describe the onychoscopic manifestations (OM) observed in hemodialysis patients.

Materials & Methods:

We conducted a prospective cross-sectional study, involving hemodialysis patients who underwent clinical examination and onychoscopy using the Dermlight DL 4 dermatoscope to assess the nails of their hands. The interpretation was performed by three examiners.

Results:

We included 39 patients (19M/20F) with an average age of 49.3 years. Thirty-four patients had at least one nail manifestation (NM), and 37 patients had at least one OM.

Among the noted NM, the most frequent was longitudinal hyperstriae (LH) (41%), followed by splinter hemorrhages (SH) (28.2%), onycholysis (20.5%), segmented nails (20.5%), lunula absence (17.9%), koilonychia (15.4%), curved nails (15.4%), Terry's nails (12.7%), subungual hyperkeratosis (SUH) (10.3%), nail pallor (10.3%) and Muehrcke's lines (10.3%).

OM were mostly SH (56.4%), followed by LH (51.3%), distal onycholysis with jagged edges (48.7%), and punctate leukonychia (35.1%). Other noted OM included SUH (28.2%), lacunar hemorrhage (10.4%), transverse lines including Muehrcke's lines (10.4%), proximal fold hemorrhage (10.4%), segmented nails (10.3%), longitudinal erythronychia (7.7%), roller coaster onycholysis (5.1%), oil drop onycholysis (5.1%), xanthonychia (5.1%), onychorrhexis (5.1%), chromonychia (5.1%), longitudinal melanonychia (LM) (2.6%), tablet undulation (2.6%), and lunula absence (2.6%). We also observed a wavy border of the distal part of the white proximal nail plate (15.4%) and a distal white LH (7.7%).

Conclusion:

Segmented nails, lunula absence, and Muehrcke's lines are specific manifestations of chronic kidney disease (CKD). Among nonspecific signs, SH, often related to capillary fragility and platelet dysfunction, jagged-edged onycholysis (often linked to onychomycosis), and leukonychia (likely of nutritional origin) are more frequent in hemodialysis patients compared to the general population. Terry's nails (white color of the nail plate with a distal erythematous band) are generally associated with cirrhosis and rarely with CKD.

We have described a new dermoscopic sign: wavy border of the distal part of the white proximal nail plate, which could be an onychoscopic translation of early-stage Terry's nails. However, this remains to be confirmed by larger studies.

In conclusion, recognizing onychoscopic manifestations of CKD early is crucial, as they can provide valuable information for the appropriate management of underlying etiologies.





dermoscopy of the porokeratosis

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Introduction & Objectives:

Porokeratosis represent a heterogeneous group of uncommon acquired or hereditary dermatoses characterized by a disorder of keratinization.

We report the case of a patient with porokeratosis and recall the pathognomonic dermoscopy of this entity, which can spare us the anatomopathological examination.

Materials & Methods:

Patient B.D., aged 22, presented with a non-itchy, erythematous macular lesion on the left nostril wing, which had been evolving for 3 years on treatment without improvement.

Clinical examination revealed a well-defined, barely elevated papule with a slightly atrophied center.

Dermoscopy revealed the following features: a hyperkeratotic halo in the periphery, giving a pathognomonic diamondring appearance, irregular dotted vessels towards the central part of the lesion, and linear vessels in the periphery.

A skin biopsy was performed.

Results:

In view of the clinical, dermoscopic and anatomopathological evidence, the diagnosis of porokeratosis was retained.

Porokeratosis by a disorder of keratinization.

There are localized or generalized forms, manifesting clinically as a dry, brownish papule, the center of the plaque is slightly atrophic and depressed, sometimes slightly pigmented, rarely hyperkeratotic.

Several erythematous-squamous dermatoses share similar clinical features, and differentiation between them is sometimes difficult, hence the value of dermoscopy.

A recent article compared the dermoscopic signs of psoriasis and porokeratosis, as stippled vessels can be found in both pathologies.

Indeed, dermoscopy of psoriasis reveals dotted vessels on a pinkish background and superficial white scales, whereas dermoscopy of porokeratosis reveals the presence of multiple irregulars dotted and linear vessels, but without the presence of central scales but rather a peripheral, crown-shaped, finely scaly collar.

The various dermoscopic signs of porokeratosis are hyperkeratotic edge giving a diamond-ring appearance, hyperpigmentation all along the peripheral edge, multiple linear-irregular or branched vessels within the keratin border and whitish structure.

Conclusion:

Several erythematous-squamous dermatoses share similar clinical features, and differentiation between them is sometimes difficult, hence the interest of dermoscopy.



Dermoscopy as a tool for the diagnosis of furunculoid myiasis mimicking sporotrichosis

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Introduction & Objectives:

Myiasis is an infestation resulting from the invasion of tissues and organs of humans and animals by diptera larvae transported, generally, by a mosquito. Myiasis can be primary or secondary. In primary myiasis, the larvae must invade healthy tissue to develop. Treatment consists of removing the larvae. Human myiasis is an often misdiagnosed and understudied ectoparasitic infestation. Dermoscopy was used as a tool for the diagnosis.

Materials & Methods:

A previously healthy 11-year-old boy was referred by the primary care physician for follow-up at a University Hospital. He was diagnosed with sporotrichosis and had been prescribed potassium iodide solution. His parents stated that a month ago the patient presented an erythematous papule and intense itching in the posterior cervical region. After evaluation by a general practioner as herpes zoster associated with secondary infection was diagnosed and treated accordingly. It progressed with stabbing pain at the site, enlargement of the lesion with a yellowish hyaline exudate discharge by an open hole. Subsequently, similar lesions appeared in the affected area exhibiting a linear distribution pattern. He searched a dermatologist, who diagnosed sporotrichosis and started treatment with the potassium iodide solution. No clinical improvement occurred and then was referred to the Dermatology Department of a University Hospital. The patient and his parents had already been treated for sporothichosis eight years ago and currently live with eight dogs and twenty cats inside the house. They reported having a sick cat diagnosed with sporotrichosis, undergoing treatment. On physical examination of the posterior cervical region, the patient presented four furunculoid lesions with a serous exsudate discharge. Each lesion measured approximately 1 cm.

Results: Observing the lesion for a few seconds, the recurrent movement of the larva towards the surface to breathe was noticed. Dermoscopy was used and confirmed the presence of the larva. There were no lesions elsewhere. The clinical diagnosis was furunculoid myiasis. Potassium iodide was discontinued. In the reported case, treatment for sporotrichosis was considered and initiated based on the linear arrangement of the lesions and epidemiological history of the patient and his family. The larvae were removed after occlusion with a topical anesthetic facilitating the procedure. The patient was also treated with ivermectin, with subsequent resolution of the lesions. The larvae were identified by an entomologist as belonging to the species *Dermatobia hominis*. In the histopathological preparation larva exoskeleton consists of undulating chitinous cuticule with pigmented spines. Within the exoskeleton are intestinal epithelium, striated muscle and blood filled luminal spaces. Human myiasis is a tropical disease that has a worldwide distribution, frequently misdiagnosed and understudied. The incidence of myiasis is correlated with poor personal hygiene and low socioeconomic status.

Conclusion: It is important to stress that the dermatologist must be aware of parasitic dermatoses, for the correct diagnosis and appropriate treatment. The treatment is the larvae removal, with subsequent regression of the lesion. *Dermatobia hominis* was identified by the entomologist as the agent of the infestation. The use of dermoscopy was useful for confirming our diagnostic hypothesis.



Keratoacanthomas: clinical and dermoscopic features

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Introduction & Objectives:

Keratoacanthoma is a benign hair follicle tumor characterized by spontaneous involution. It typically occurs in sunexposed areas in elderly individuals. Clinically, it presents as a nodule or dome-shaped tumor with a central keratin-filled crater. The main clinical, dermoscopic, and histological differential diagnosis is with squamous cell carcinoma (SCC). The aim of our study is to describe and investigate the different clinical and dermoscopic aspects of this tumor.

Materials & Methods:

Prospective, descriptive study conducted between June 2021 and July 2023 at the Avicenne University Hospital in Rabat-Salé involving 11 patients.

Results:

The study included 11 patients, 7 women and 4 men, with a mean age of 61.5, intense sun exposure was noted in 6 patients. The mean duration of evolution was 6.5 months. Spontaneous involution was noted in 2 patients. All cases were located in sun-exposed hair-bearing areas. Average size was 2.8cm.

The most common dermoscopic features were the central structureless area surrounded by** scales, white circles and polymorphic vascularization.

Two patients presented atypical verrucous features, with dermoscopic examination showing white structurless areas with scales.

Histological diagnosis is based on the appearance of the arciform epithelial lip present around the central crater and continues with the adjacent epidermis.

Conclusion:

KA is a neglected benign tumour affecting the elderly. It is often difficult to differentiate from SCC. However, a typical dermoscopic pattern combined with the involutional phase helps to rule out SCC. Histological proof is required in patients seen in the growth or maturation phase of the tumor.



Verrucous Spitz Nevus - Dermoscopy's Role in Distinguishing a Clinically Confounding Diagnosis - Two Pediatric Case Reports

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Introduction & Objectives:

Spitz nevi pose a considerable challenge in distinguishing them from melanoma or other non-melanocytic skin lesions. Additionally, they may induce anxiety in patients or parents. Partial or complete involution seems to be a common biological behavior, still, in some studies, 20% of the lesions showed a growing or stable pattern. Herein we present two pediatric cases of Spitz nevi with warty appearance.

Materials & Methods:

Case 1

A four-year-old girl sought consultation for a 4mm pink papule on the dorsal side of her hand that had emerged two months earlier. Dermoscopy revealed reticular depigmentation, dotted vessels, red globules and fine scale. Despite a suspicion of Spitz nevus, the recommendation for excision was not accepted by the family.

After four months, the patient returned as the lesion progressed into a 7mm nodule with hyperkeratotic surface. Dermoscopy revealed remnants of reticular depigmentation, hairpin vessels surrounded by a whitish halo, pink structureless areas and thick scale.

Complete excision was performed. The histology showed a melanocytic proliferation, with acanthotic epidermis, hyperkeratosis and elongated epithelial ridges, consisting of epithelioid or spindle-shaped cells, with maturation at deep levels. There was 1 mitosis/mm² in the superficial third. The morphological aspects corresponded to a Spitz nevus.

No sign of reccurence was seen at 16 months of follow up.

Case 2

A four-year-old girl presented with a 6 mm pink verrucous nodule on her forearm that grew over the last 5 months. Dermoscopy revealed reticular depigmentation, red globules of different sizes, dotted vessels and scale.

Upon complete excision, the histology disclosed a melanocytic proliferation consisting of epithelioid or spindle-shaped cells, with maturation at deep levels. There were 3 typical mitosis/mm² and pagetoid ascension of the cells. The histopathologic and immunophenotypic profiles (SOX10, PRAME, p16, Ki67) sustained the diagnosis of Spitz nevus.

At 11 months of follow-up there was no sign of recurrence.

Results:

Despite a verrucous appearance, the dermoscopy oriented towards the diagnosis of Spitz nevus.

A viral wart was the main differential diagnosis in our cases. Verrucae vulgaris are common at this age, and papillary capilaries can be seen on dermoscopy.

Radial hairpin vessels with white hallo and central crust are characteristic for keratoacanthoma. Irregular hairpin vessels together with pink globular-like and structureless areas are seen in thick amelanotic melanoma.

Conclusion:

Melanoma is very rare in children, but the incidence of the spitzoid type is relatively high in this age group. Spitz nevi are benign entities, but improper treatment methods, such as cryotherapy, electrosurgery, or topical keratolytics may lead to growth or recurrence. In children, as in adults, a verrucous lesion with dermoscopic spitzoid characteristics should prompt adequate excision.



Dermoscopy assessment of cutaneous larva migrans: Case series

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Introduction & Objectives:

Cutaneous larva migrans (CLM) is a migratory eruption of the skin caused mainly by hookworm larva (Ancylostomatidae). Clinical manifestations generally are sufficient for diagnosis of CLM, by finding linear, serpiginous, erythematous lesions, where the larva digged into the skin. However, dermoscopy may be a useful tool for assessment of CLM. We report 2 cases of CLM, in which dermoscopy was helpful not only to locate the body of larva but also to assess treatment response.

Materials & Methods:

Case 1 was a 31-year-old male miner presented with bullous, pruritic lesion, followed by a linear erythematoushiperpigmented tract in 1 month of evolution on his thigh. The dermoscopy (DermLite; 10x) revealed a well-defined erythematous tract with brown dots along the tract that corresponding to migration path of larva, white linear structure correlating with the body of larva, and multiple segmental yellowish line corresponding to vesicles along the tract. There were also crusted erosion at some part of the tract.

Case 2 was a 28-year-old male office worker, presented with pruritic, serpiginous tract on his back, some parts of the tract were flat and hypopigmented, and the later part were elevated, vesicular and erythematous. The lesion developed 2 month before and was treated with cryotherapy (hence the hypopigmentation) but become active again in the last 1 month. He had a history of beach vacation prior the appearance of skin lesion. On elevated part, dermoscopy (DermLite; 10x) showed erythematous tract with red dots a in a serpiginous pattern correlating to the migration path of larva and white linear structure corresponding to body of the larva.

Both cases were diagnosed as CLM and treated with oral albendazole 400 mg daily for 5 days and albendazole 10% ointment applied twice a day. The albendazole 10% ointment was made by mixing 3 tablets of albendazole 400mg into 12g vaseline. A week after treatment, dermoscopy of case 1 showed scales and scabs with brown structureless areas. Follow-up dermoscopic assessment of case 2 were done after 2 months, which also revealed brown structureless areas and scabs.

Results:

The dermoscopy of both cases revealed larva's migration path, by finding the erythematous tract with brown or red dots along the tract, as described as majority of the literature. In addition, dermoscopy also helps to locate body of larva, revealed as white linear structure. Case 2 showed that prior cryotherapy did not stop larva migration, might be caused by the failure to locate the active part. The dermoscopy helped to guide the patient to target the larva in using topical treatment. The dermoscopy after treatment in both cases shows brown stuctureless areas and scabs, without the body of larva.

Conclusion:

Dermoscopy may support in diagnosis and locate of the larva of CLM, thus may help to narrow and focus the area of topical treatment. Routine use of dermoscopy after treatment may reassure the treatment success.





A New Mnemonic for the Dermoscopic Diagnostic Criteria for Melanoma

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Introduction & Objectives: Diagnosis of melanocytic lesions, particularly melanoma, is one of the key skills in dermoscopy. The use of the "3A2B1C-SNIP" mnemonic helps in memorizing the dermoscopic criteria for melanoma.**

Materials & Methods: The following mnemonic was developed to facilitate memorization of the dermoscopic criteria for melanoma: "3A2B1C-SNIP", where 3A stands for the atypical structures (atypical pigment network, atypical dots and globules, atypical vascular structures), 2B stands for blue-white structures over raised areas and blue-white structures over flat areas, 1C stands for chrysalis/crystalline, SNIP stands for streaks, negative pigment network, irregular blotches and peripheral brown structureless areas.

2 groups of attendees to a series of lectures on melanoma, comprised of general practitioners and pediatricians (43 and 48 people, respectively, with similar composition in terms of the types of specialties involved in each group) were given a presentation on the dermoscopic criteria for diagnosis of melanoma. The aforementioned mnemonic was presented to only one of the groups. An hour after the lecture a post-test was administered in both groups. Also, another post-test was administered approximately 2 weeks later, by the end of the lecture series.

Results: The test results showed that in the short term, the number of attendees who were able to accurately recall the dermoscopic criteria for melanoma was almost twice as high in the group where the "3A2B1C-SNIP" mnemonic had been presented as compared to the other group. In the longer term, the difference in accurate recollection between the two groups decreased to about 60%.

Conclusion: In the short term, the "3A2B1C-SNIP" mnemonic makes it easier to memorize the melanoma-specific structures seen in dermoscopy. The mnemonic also significantly improves the longer-term recollection of the dermoscopic criteria for melanoma.



Dermoscopy of trichilemmoma

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Introduction & Objectives:

Trichilemmoma is a benign cutaneous tumor originating from the outer root sheath of hair follicle. We report the dermoscopic features of a case of trichilemmoma.

Materials & Methods:

We report the dermoscopic features of a case of a 68 -year-old man presented trichilemmoma

Results:

A 68 -year-old healthy man with no medical history presented with a 3-months history of an asymptomatic, slow growing papule on the upper lip without history of trauma .Physical examination revealed a 5 mm smooth, skin-colored, dome-shaped papule.

Dermoscopic examination of the lesion using DermLite DL4 (3Gen, San Juan Capistrano, California, USA) was performed and images were captured with DermLite MCC adapter. Dermoscopy revealed white structures, hemorragic areas on an erythematous background with dots vessels and rare hairpin vessels.

Surgical excision was made with histologic examination showed a tumor proliferation in the superficial dermis in contact with the epidermis. It was made up of basaloids cells in the periphery and clear central cells without atypi .Diagnosis of trichilemmoma was established, and CBC was ruled out.

In 1962, Headington and French first described trichilemmoma as a benign neoplasm with differentiation toward pilosebaceous follicular epithelium, or outer root sheath.

It usually occurs on the face, ears, and neck but can also occur on forearms and hands.

Recently, Horcajada-Reales et al. have reported the dermoscopic characteristics of trichilemmoma: the red iris-like structures (radial peripheral linear vessels with distal thickening, taking on a triangular form); reflective whitish areas surrounding those vessels; and central hyperkeratotic masses.

Then Lozano-Masdemont et al. described peripheral linear vessels arranged radially in a triangle formation, hairpin vessels surrounded by reflective whitish areas, and a central crusted and hyperkeratotic area. Our case has the same description as Lozano in terms of doted and hairpin vessels, whereas we didn't find Horcajada-Reales description especially the red iris-like structures

Conclusion:

We aim to emphasize that the dermoscopic examination can be an extremely valuable and noninvasive tool in the orientation of diagnosis of a trichilemmoma. Histologic analysis remains key to confirm the diagnosis.



Atypical Spitz nevus in childhood - case report

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Introduction & Objectives: Spitz nevus is a rare melanocytic neoplasm of epithelial or spin-shaped cells. It was first described in 1948 by Sophie Spitz (American pathologist) as a "juvenile melanoma"- a special form of benign melanocytic lesion.

Materials & Methods: Due to diversity in the presentation of the clinical picture, as well severe histological distinction of the diagnosis, there is no consensus or evidence-based treatment guide. The approach is individual and treated on a case-by-case basis.

Results: In this paper we present a female child at the age of 4 years with the appearance of a pigmented nodular lesion on the right cheek, observed several months after birth. The lesion

has a steady growth that has intensified in the last six months. Furthermore, the dermoscopic findings provide data on the change of color of this lesion.

Surgical excision "in toto", as well as histological and immune-histochemical investigations have been carried out, confirming the dermoscopic diagnosis of Spitz nevus.

Conclusion: Regular dermoscopic monitoring, as well as histological and immune-histochemical diagnosis are the basis for early diagnosis and differentiation of Spitz nevus from Spitzoid melanoma.



Trichotillomania associated with trichotemnomania

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Introduction & Objectives:

Trichotillomania is a psychiatric disorder characterized by recurrent and compulsive hair pulling, resulting in noticeable hair loss. **Trichotemnomania** is a less common psychiatric condition characterized by compulsive hair cutting or trimming. Here, we describe a case of trichotillomania combined with trichotemnomania

Materials & Methods and Results: A 9-year-old girl was referred to our department for hair loss evolving for 3 months. The patient had no significant medical history. She exhibited signs of anxiety related to her alopecia. Physical examination revealed a well-defined linear alopecic patch located on the central parting of the scalp. Trichoscopy revealed the presence of hair shafts of varying lengths and shapes (trichoptilosis, V sign, broom hairs and black dots). We also noticed the presence of short broken hairs of similar length particularly on the frontal region. Clinical and trichoscopic findings were highly suggestive of the diagnosis of trichotillomania combined with trichotemnomania. When questioned, the patient denied any history of hair pulling or cutting. She acknowledged feeling stressed and anxious during the last three months due to familial conflicts. The patient was referred to psychiatry department.

Conclusion: Trichotillomania and trichotemnomania are both obsessive-compulsive disorders. The association of these two disorders has been described in 2 adult patients. The first one was a 24-year-old woman. On examination, trichoscopy of the scalp showed several "cleanly cut" terminal hair shafts of normal morphology with no features of trichotillomania, while trichoscopy of the eyebrows revealed broken hair shafts of different lengths (V-sign, black dots) and hemorrhagic suffusions suggestive of trichotillomania. The second case was a 26-year-old woman who had alopecia of the eyebrows, axillary and pubic areas for two years. Trichoscopy of these areas showed trichoscopic features of both trichotillomania and trichotemnomania. These cases underline the usefulness of trichoscopy in the diagnosis of compulsive hair disorders. In our observation, trichoscopic findings were helpful to make the diagnosis of combined trichotillomania and trichotemnomania. Trichotemnomania shares similarities with trichotillomania in terms of its compulsive nature and potential impact on emotional well-being, as described in our patient. Collaborative efforts between dermatologists, psychiatrists are essential for providing comprehensive care and addressing the underlying emotional needs of these patients.



Intraoperative dermoscopy (onychoscopy) of the nail unit - a systematic review

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Introduction & Objectives:

Dermoscopy of the nail unit (onychoscopy) is a method which allows for non-invasive observation of the nail structures, increasing the accuracy of clinical diagnosis. Currently, it is used in evaluation of both inflammatory and neoplastic conditions of the nail unit. However, in contrast to the skin, the anatomy of the nail unit prevents direct observation of nail bed or nail matrix structure during classic onychoscopy. Intraoperative onychoscopy is a variant of the technique which uses direct visualization of the nail unit structures after nail plate avulsion. The aim of this systematic review was to summarize the current state of knowledge on intraoperative onychoscopy.

Materials & Methods:

The MEDLINE, EMBASE and Cochrane databases were systematically searched in January 2024. All types of study design assessing intraoperative dermoscopy of the nail unit were included in this study. The risk of bias of included studies was assessed using the Joanna Briggs Institute critical appraisal tools.

Results:

The qualitative synthesis of 19 studies totalling a number of 218 cases in 217 patients included the following entities: melanoma, nevus, hypermelanosis (melanocytic activation), melanocytic hyperplasia, melanophages accumulation, squamous cell carcinoma, glomus tumour, lichen planus, onychomatricoma, onychomycosis and subungual exostosis.

Conclusion:

The main limitation of the study was a relatively low number of identified studies, most with low levels of evidence. Intraoperative onychoscopy does not replace histologic examination, though it may be useful in determining the modality of surgical diagnostic procedure.