



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. SCAR SARCOIDOSIS: A UNUSUAL CLINICOPATHOLOGIC PRESENTATION
2. HAIR REGROWTH PATTERN IN ALOPECIA AREATA PATCHES: A RETROSPECTIVE CROSS-SECTIONAL ANALYSIS
3. CLINICAL AND HISTOLOGICAL ASPECTS OF PERIORBITAL DARK CIRCLES IN SOUTH ASIANS: A CROSS-SECTIONAL PILOT STUDY
4. SPITZ NEVI ON THE EAR: CASE REPORT

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Looking forward to your valuable feedback.

Best Regards,

Medical Team, Micro Labs Limited.



Scar Sarcoidosis: A Unusual Clinicopathologic Presentation

Introduction:

Scar sarcoidosis (SS), a rare type cutaneous sarcoidosis, is caused by scarring. The clinicopathologic characteristics and relevance in clinical prognosis have been obscured because to its rarity. ^[1] It might appear as a single sarcoidosis symptom or as part of a larger constellation of symptoms in systemic sarcoidosis. ^[2]

Methods:

The objective of this study was to look at clinical, laboratory, and histopathologic results in order to better understand the characteristics linked to the development of SS and systemic involvement. The clinical, laboratory, and histopathologic results of SS were evaluated retrospectively. Clinical parameters such as demographics, anatomic location, number of lesions (single, multiple), presence of symptoms, latent duration, scar damage types, and fraction of systemic involvement were studied.

Results:

Skin lesions were most common in females (85.7%) and on the head and neck in the 21 individuals with SS (57.1 %). The average latent time was 163.5 months, and 13 (61.9%) of the patients had multiple lesions. There was no single sort of injury that was linked to SS. Discrete sarcoidal granulomas were seen histologically, surrounded by tightly packed collagen bundles with a thickening of many fibres.



Representative cases of scar sarcoidosis related with various injury types Blepharoplasty. Repair of laceration, Fall down injury.

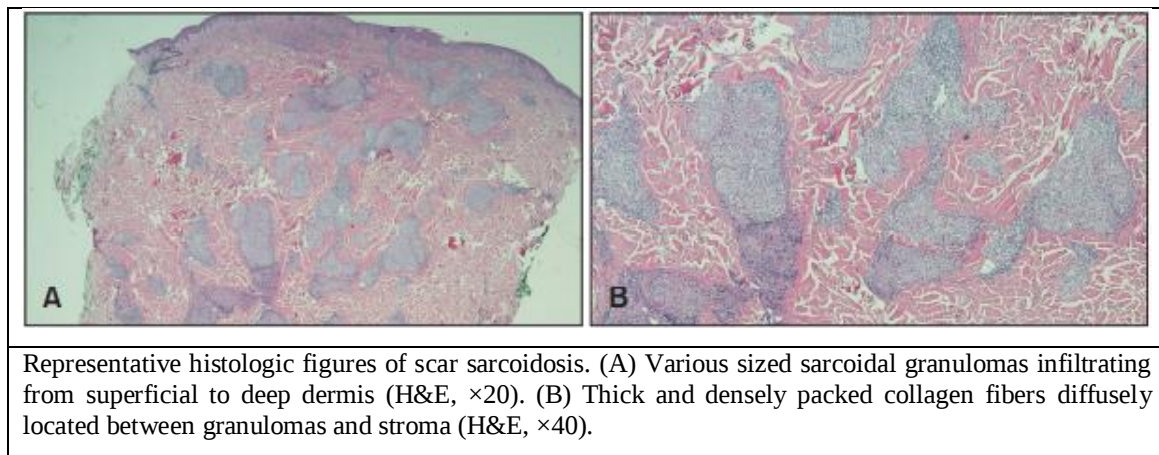
Ten patients (47.6%) had systemic involvement, which resulted in substantially more multiple lesions, a longer latent time, and a higher mean serum angiotensin-converting enzyme level than those who did not have systemic involvement.

Discussion:



Only SS, as its name suggests, is connected with previous cutaneous lesions among the numerous particular types of the CS. SS can be restricted to the skin alone, although it can also occur before or after systemic involvement. Despite the fact that SS has several fascinating characteristics, clinical data has been reported in a very restricted way. [3]

Although the study hypothesized that a specific injury type was linked to SS, the sorts of



injuries were fairly diverse. Blepharoplasty, which may affect both or just one eyelid, was one of the more fascinating injuries linked to SS. According to several writers, asymmetry in lesion development was caused by differences in surgical technique or postoperative care. Despite the fact that the individuals were treated bilaterally, there is no known reason for why SS arises in only one eyelid. [4]

In terms of the proportion of invading cell type, the study findings were similar to earlier investigations of CS. However, we identified significant stromal fibroplasia around bare granulomas and hypertrophic scar-like alterations in 71.4 percent of cases compared to CS. The fibrotic alteration in CS was mostly seen in the granulomatous sections, with a rate of 1.0 percent to 14.0 percent. [5]

Multiple lesions, a long latent period, and increased ACE were revealed to be important components in the research. However, this study only looked at SS, and the association between the clinical subtypes of CS might be different. Long latent periods may be linked to systemic involvement, since the longer the exposure to the pathogenic antigen, the greater the chance that the chronic inflammatory process may deteriorate systemically. The epithelioid cells of sarcoidal granulomas release ACE, which aids in the diagnosis of sarcoidosis. In a recent study, this rise was usually linked to a certain type of CS and illness development. This connection was also shown to be associated with SS for systemic involvement, according to the research.



Conclusion:

Finally, the study looked at the clinicopathologic aspects of SS, such as damage kinds and variables linked to systemic involvement. There was no specific injury type linked to SS that could be proven. Additionally, when SS patients have many lesions, lasting scars, and high serum ACE, the likelihood of systemic involvement may be increased. Although the pathomechanism and clinical implications of our results have been restricted, they may aid in understanding the nature of SS and how to treat it.

SS has been related to a variety of scarring causes, although no one form of damage has been established as the cause. Although the specific pathomechanism is unknown, when patients have many lesions, long-term scarring, and high serum angiotensin-converting enzyme, the likelihood of systemic involvement should be explored.

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Hair Regrowth Pattern in Alopecia Areata Patches: A Retrospective Cross-Sectional Analysis

Introduction:

According to the DIMIT classification, the morphology of hair regrowth in alopecia areata (AA) patches may be divided into four types: diffuse, irregular, marginal, and targetoid patterns. However, no research has been done into the elements that influence hair renewal patterns. [1] Various variables, including clinical subtypes of AA, treatment approaches, and demography, have been suggested to affect hair regrowth patterns. However, no research has been done into the elements that influence hair renewal patterns. Because hair regrowth patterns might differ depending on treatment methods and AA patch size, the goal of this study was to see if DIMIT-classified hair regrowth patterns in AA patches are related to treatment modalities and patch size. [2]

Methods:

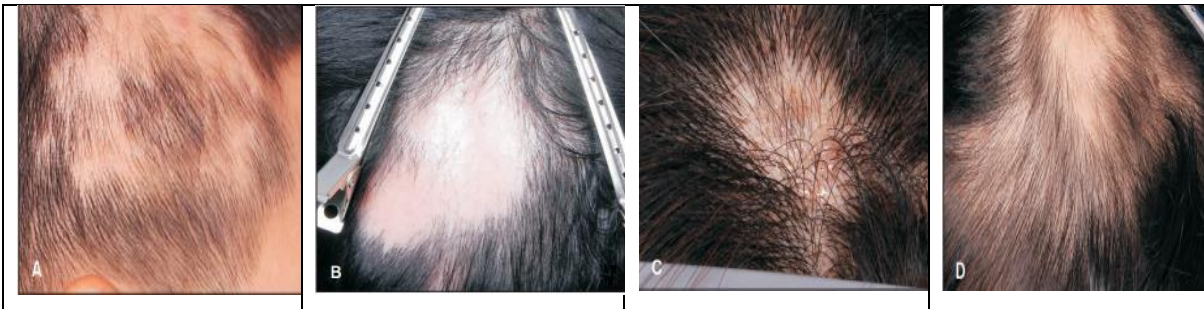
This study comprised a retrospective cross-sectional analysis of patients with AA who were evaluated serial clinical pictures of AA patients' scalps, as well as those with hair regrowth on AA patches. Our study's inclusion criteria were as follows: 1) patients who came to the clinic for the first time during the study period; 2) patients who came two or more times; and 3) patients who took serial images for regrowth evaluation. By comparing baseline and follow-up images, the hair regrowth pattern was established. According to DIMIT categorization, hair regrowth morphologies were divided into four categories: diffuse, irregular, marginal, and targetoid.

Results:

The study comprised 51 patients, 31 of whom were male and 20 of whom were female, with a mean age of 40.1 years. The majority of the excluded patients were never followed up on. Patchy-type AA3,4 is defined by one or more circumscribed AA patches in all of the patients. Between the treatment groupings, there were significant variations in age, total patch number, and mean patch size. A total of 152 AA areas with hair regrowth were investigated. The diffuse hair regeneration pattern was found to be the most commonly, followed by the marginal, targetoid, and irregular hair renewal patterns. The most commonly utilised treatment method was TCS, which was followed by TA ILI, DPCP, and SCS in that order. There were statistically significant relationships between the diffuse pattern and patch size >2 cm, the irregular pattern and triamcinolone acetonide intralesional injection, the marginal pattern and systemic and topical corticosteroid, and the targetoid pattern and patch



size >2 cm.



Hair regrowth patterns according to treatment modalities and patch size. (A) Irregular hair regrowth pattern after treatment with triamcinolone acetonide intralesional injection. (B) Marginal hair regrowth pattern after treatment with systemic and topical corticosteroid. (C) Diffuse hair regrowth pattern in alopecia areata patches ≤ 2 cm in diameter. (D) Targetoid hair regrowth pattern in alopecia areata patches >2 cm in diameter.

Discussion:

This is the first study to look at the elements that influence hair renewal patterns. The hair regrowth pattern is linked to the treatment technique employed on the AA patch and its size, according to this retrospective investigation. Hair regrowth in the area where the triamcinolone was injected is likely to be uneven after TA ILI, which might imply that hair regrowth happened there. ^[2] Marginal hair regrowth in response to systemic corticosteroid injection suggests that disease activity differs between the centre and the periphery of AA patches, and it adds to the notion that a focal point acts as the AA patch's starting point. Hair regrowth pattern is also influenced by the size of AA patches. According to the findings, smaller AA patches had a higher likelihood of exhibiting diffuse hair regrowth patterns. This might be a flaw in morphological hair renewal pattern determination. To put it another way, since it is difficult to tell the difference between hair regrowth and non-renewal in tiny AA regions, investigators may interpret it as a widespread hair regrowth pattern.

The size of the patch may have an impact on the regrowth patterns. Significant disparities in patch size were discovered across treatment groups based on clinical and demographic data. As a result, this might be a complicating element in AA patch renewal patterns. Larger AA patches, on the other hand, have a targetoid hair regrowth pattern. ^[3] Since no appropriate cases could be found in the outpatient clinic retrospective data, the no-treatment control group was not included in this investigation. Furthermore, there is no information about the morphology of natural hair regrowth in AA areas. The morphology of hair regeneration has seldom been studied in relation to its extent in studies of the natural history of AA. However, more research into AA's natural history is required.

Conclusion:



In conclusion, hair regrowth patterns in AA are affected by treatment technique and AA patch size. Additional research is needed to look at additional factors linked to hair renewal patterns and to learn more about the aetiology of AA.

Hair regrowth patterns in AA patches are influenced by treatment techniques and patch size.

Reference:

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Clinical and histological aspects of periorbital dark circles in South Asians: a cross-sectional pilot study

Introduction:

Patients who see dermatologists frequently complain about periorbital dark rings. Lesions are generally bilaterally symmetrical and affect the lower eyelids more frequently than the upper. Patients describe their look as "tired, melancholy, or hung-over." Dark circles are often linked to age or brief bouts of weariness, sickness, or dehydration. Many people, however, have a permanent darkening that does not change with time. [1] Tear trough depression, venous congestion, acanthosis nigricans, and atopic dermatitis are some of the hypothesised reasons of dark circles. Few research has looked at dark circles from a histological standpoint. Several writers have stated that black circles are more evident in specific ethnic groups, mainly Asians, despite the fact that they can exist in any racial/ethnic group. The objective of this study was to learn more about what causes periorbital dark circles in South Asians. [2]

Methods:

The study's objective was to compare the clinical and histological aspects of dark circles in South Asians to neighbouring unaffected skin. All individuals had their periorbital dark circles and neighbouring unaffected skin evaluated clinically, using skin biopsies and narrow-band reflectance spectrophotometry.

Results:

A total of 50 people were screened, and 16 (nine men and seven women, average age 40) met the inclusion/exclusion criteria and agreed to participate in the study. Dark circles appeared at an average age of 22 years, with 81 percent (13/16) reporting a familial history of dark circles. The vast majority had no comorbidities and did not use sun protection on a regular basis. The intensity of dark circles ranged from mild to severe among the participants. In addition, erythema affected 14 of the 16 people. On observation, those with significant dark circles looked to have lichenification of the eyelid skin, but microscopic investigation revealed no histologic link. The worldwide clinical severity ratings of mild, moderate, and severe pigmentation were linked with the melanin index. There was no link between the clinical severity of dark circles and the difference in Mexameter erythema values between affected and unaffected skin. In both the epidermis and the dermis, histopathological examination revealed varied degrees of melanin. In half of the individuals, there was no



change in epidermal melanin quality between afflicted and unaffected skin. Seven of the remaining subjects had more epidermal melanin in the afflicted skin, while one had less. In the damaged skin, fourteen (88%) had higher dermal melanin than the unaffected skin.

			
Periorbital dark circles in a South Asian male	Periorbital dark circles in a South Asian male with prominent underlying vessels, giving a blue-green color to the skin	Periorbital dark circles in a South Asian male accentuated by exaggerated tear trough depression and appearance of lichenification.	Periorbital dark circles in a South Asian male with extension to pigmentary demarcation line F on the zygoma.

Discussion:

Periorbital dark circles can be caused by a variety of factors. Only a few studies, however, have attempted to assess the degree of pigmentation in dark circles in people of colour to evaluate the severity and location of enhanced pigmentation. The upper dermis of the tissues was assessed qualitatively and found to exhibit varying degrees of melanophages. Chatterjee et al. found mixed dermoepidermal pigmentation in the majority (70.73 percent) of 82 individuals with dark circles, as well as clinicopathological concordance for dermal pigmentation. Melanin content Mexameter readings corresponded with clinical severity assessments of dark circles in this investigation, indicating melanin as the source of dark circles in the patients. Furthermore, dermal melanin was graded higher than epidermal melanin, implying that dermal melanin is primarily responsible for the appearance of dark circles. Darkening of the lateral cheek and periorbital skin is caused by pigmentary demarcation line F, which is frequently associated with dark circles. ^[3]

Depigmenting creams and procedural therapies including as transconjunctival blepharoplasty, autologous fat transplantation, resurfacing lasers, and fillers are common treatments for dark circles. A simple Internet search for "dark circles" reveals a plethora of home cures. It's worth noting that there isn't a single therapy that completely eliminates dark circles in South Asians. This reflects the essentially epidermal character of the aforementioned therapies, but the study findings suggest that increased melanin in the dermis may be the primary cause of dark circles, which is difficult to treat with depigmenting drugs.



It also reflects the fact that the problem in afflicted patients is multifaceted. Clearly, more effective therapies for cutaneous pigmentation are needed.

Conclusion:

In conclusion, the study contributes to the knowledge of this prevalent patient complaint among South Asian patients. As previously said, periorbital dark circles can appear for a variety of causes, which are likely to differ based on a patient's UV exposure and racial/ethnic background. This knowledge should aid doctors in diagnosing, counselling, and managing patients with dark circles, particularly those from South Asia.

Increased dermal melanin is linked to dark circles in this group of South Asians. Exaggerated tear trough depression, translucency of eyelid skin, and pigmentary demarcation lines are all possible contributors.

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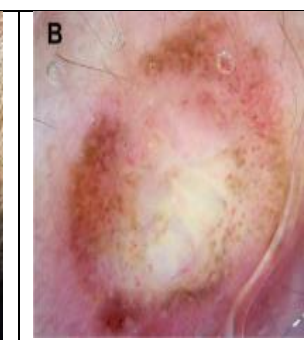
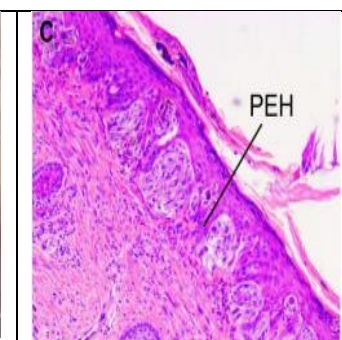
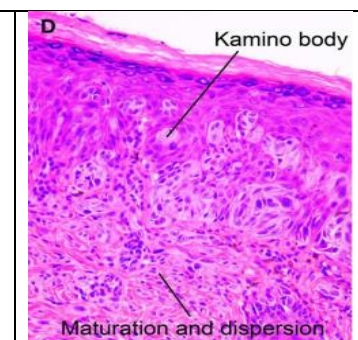
Spitz nevi on the Ear: Case Report

Introduction:

Spitz nevi are melanocytic proliferations with epithelioid, spindle, or both types of melanocytes. Spitz proliferations can develop in a biological sequence ranging from benign Spitz nevi (SNs) to atypical Spitz tumours (ASTs) and malignant melanomas (MM), making differentiated diagnosis challenging. Treatment recommendations vary due to misdiagnosis or over diagnosis. Given the low overall survival rates of melanomas, there is a need for better awareness and detection of SNs. [1] Typical nevus lesions are symmetrical, pink-red, smooth-surfaced, spherical, firm papules that can grow rapidly to a diameter of 6–8 mm in six months and then stay stationary for years. The head and the lower extremities are the most usually afflicted areas. The ear, for example, is a unique place that presents a unique problem. [2]

Case Report:

A healthy 18-year-old male went to the Plastic Surgery clinic with a one-year history of an expanding lesion on his left ear's antihelix. The lesion began as a little red papule and steadily grew larger without causing any discomfort. Skin cancer in the family and a history of trauma were both ruled out. A 0.6 cm 0.6 cm well-circumscribed, moderately symmetric, dome-

			
(A) Single, well-circumscribed 0.6×0.6 cm, dome-shaped, red papule on the left ear	(B) Dermatoscopic examination showed the central white-red area was intermingled with polymorphous vessels including dotted, linear-irregular and comma-like features. A peripheral globular and pseudo-network pattern of prominent brown pigmentation could be observed. (	(C) Epidermal hyperplasia with parakeratosis and pseudoepitheliomatous hyperplasia (PEH). A symmetric proliferation of variable-sized nests of melanocytes at the dermoepidermal junction with shrinkage artifacts around nests. Nests vertically oriented along rete, Melanocytes within the nests share the vertical orientation. (hematoxylin and eosin (H&E) stain, scale bar = 200 μm)	(D) Kamino body, rounded, dull pink areas of trapped basement membrane material within the epidermis. Nests diminish in size and show transition to single cells with depth. Diminished cellular and nuclear sizes with depth as called maturation. Melanocyte disperses at the base of the lesion. (hematoxylin and eosin (H&E) stain, scale bar = 50 μm)

shaped, homogeneous reddish papule with a light verrucous surface was discovered on physical examination. On the surface, there was telangiectasia and vascular pulsations that



could be felt. In his head and neck, no lymphadenopathy was discovered. The total blood cell count and chemical profile were both normal in the laboratory. There were no additional abnormalities discovered. A central white-red region was mixed with polymorphous vessels with dotted, linear-irregular, and comma-like characteristics on dermoscopic inspection. A spherical and pseudo-network pattern with strong brown colouring may be seen on the periphery (Figure 1B). Following the seven-point dermoscopy checklist and the patient's desire, excision was conducted to clarify the pathological identification.

A complex Spitz nevus was diagnosed histopathologically, with a symmetrical, well-circumscribed, and clearly delineated proliferation of nests or fascicles of melanocytes mostly situated at the dermal-epidermal junction and inside the superficial dermis. Pseudo-epitheliomatous hyperplasia was seen in the epidermis (PEH). The central pagetoid dispersion was seen. The "raining-down pattern" refers to how the nests are vertically positioned along the rete. Melanocytic nests in the epidermis were rather homogeneous in size and shape, with the same vertical orientation as adjacent keratinocytes, and there were artifactual clefts between nests and keratinocytes. The melanin pigment was lacking in the majority of melanocytes except superficially, and nevus cells exhibited increasing maturation toward the base of the lesion. No further immunohistochemical analysis was performed since the surgical resection margin was negative. The patient was extensively monitored for a year after surgery, and no recurrence or metastasis was discovered.

Discussion:

SNs can be difficult to differentiate from hemangiomas, granulomas, and malignant melanoma (MM) because of their wide range of morphologic appearance and varied degrees of vascularity. In dermoscopy, SNs are distinguished by a starburst pattern (51%), a dotted vascular pattern (19%), or a globular pattern with reticular depigmentation (17%).^[3] In a study of 349 Spitz nevi, epithelioid and spindled cells were found in 100% of the cases. Maturation (72 %), inflammatory infiltrate (70 %), epidermal hyperplasia (66 %), melanin (50 %), telangiectasias (40 %), Kamino bodies (34 %), desmoplastic stroma (26 %), mitosis (23 %), pagetoid extension (13 %), and stroma hyalinization (13 %) were among the other findings (8 %). Aside from AST and MM, Spark's nevus, a kind of melanocytic nevus that was previously known as "dysplastic Spitz," is on the differential diagnostic list. Spark's nevus has the cytological traits of Spitz's nevus (Spindle/ Epithelioid cells with visible central nucleolus and copious cytoplasm) as well as the "bridging" architectural pattern of Clark's nevus on histology.^[4]



Excision, electrosurgery, and cryosurgery are some of the therapeutic options for Spitz nevi. Complete excision is the most recommended preventative step, especially in people who are nearing or have passed puberty. Clinical follow-up should be considered, with yearly or semi-annual evaluations being suggested. While the clinical and pathological aspects of this case are reported in detail, individual instances are not always typical. Given the dearth of expertise with this form of nevus and the short number of documented instances, further cases and study with large sample sizes are needed.

Conclusion:

In conclusion, a case of "Special site" nevus with an alarming polymorphous vascular, peripheral globular, pseudo-network pattern and mild pigmentation was observed on the ear. Dermoscopic and histological results of this unusual skin lesion were reported, which might be useful in future situations both educationally and diagnostically. The most essential thing is to be aware of and recognise the typical and varying patterns of SNs in order to prevent over diagnosis as melanoma and all of the consequences it entails.

Spitz nevus (SN) is a melanocytic lesion with atypical cytology and architecture. It might be difficult to tell the difference between atypical Spitz tumours (AST), Spitz melanoma, and conventional melanoma. SNs commonly form on the skin of the head and lower extremities in Caucasians.

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