



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:

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2. **DERMATOMYOSITIS PATIENTS' CUTANEOUS MANIFESTATIONS AND CORRESPONDING DERMOSCOPIC FEATURES**
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Best Regards,

Medical Team, Micro Labs Limited.



Secondary Intention Healing of Nasal Ala and Tip Defects: A Simple and Beneficial Treatment Alternative

Introduction:

The nose is placed in the centre of the face and is a crucial cosmetic unit because it is split into nine parts. Due to the three-dimensional projection of the ala, the thin dermis, restricted overlaying tissue mobility, the alar groove, and free margin distortion, dermatologic surgeons have significant challenges while reconstructing nasal ala and tip abnormalities. Skin grafts, free cartilage grafts, different flaps, and secondary intention healing have all been documented as treatments for these abnormalities. ^[1]

Secondary intention healing was used to treat 42 cases of nasal ala and tip deformities in this study, which is straightforward and cosmetically pleasing. The goal of this study was to assess the aesthetic efficiency of secondary intention healing of nasal ala and tip abnormalities and to give a simple and helpful treatment alternative to surgeons.

Methods:

42 individuals with subsequent intention healing nasal reconstructions were included in the study. Excisional defects ranged in size from 0.5cm0.7cm to 1.2cm1.5cm. Every 3 to 5 days, the foam dressing that covered the sores was replaced. Based on the definitions presented in the literature, wound aesthetic results were assessed as outstanding, good, acceptable, and bad.

Results:

All 42 wounds healed in 3 to 4 weeks, with uniform colour, no visible adverse responses, and a high level of patient satisfaction. 16 excellent instances (38.1%), 19 good cases (45.2%), 7 acceptable cases (16.7%), and 0 terrible cases were evaluated aesthetically.

Discussion:

Patients with nasal abnormalities have a variety of reconstructive options, including primary closure, skin grafts, local, regional, or free flaps, and secondary intention healing. Given the importance of the nose in daily life, it is critical that defect repair retains the integrity of complex face functions and expressions, as well as facial symmetry and a desirable aesthetic conclusion. As a result, before to rebuilding, decision-making based on aesthetic component and defect size is crucial. Healing through secondary intention, which is ignored and underutilised today, was not mentioned. ^[2] Secondary intention healing was found to be an efficient strategy for repairing nose tip and alar defects smaller than 1.5cm in diameter in this



investigation, with few problems. Another study found that secondary intention healing produces good aesthetic effects in Asians with nasal ala and dorsum deformities less than 1 cm in diameter. ^[3]



Figure 1 Defects involving lateral ala healed by secondary intention of a 77-year-old female trichoblastoma patient, with excellent outcome: (A) before surgery; (B) immediately after surgery; (C) 3 days after surgery and (D) 3 weeks after surgery.



Figure 2 Defects involving anterior tip healed by secondary intention of a 62-year-old female basal cell carcinoma patient, with good outcome: (A) immediately after surgery; (B) 3 days after surgery; (C) 1 week after surgery and (D) 2 weeks after surgery and (E) 1 month after surgery



Figure 3 Defects involving anterior tip healed by secondary intention of a 74-year-old male basal cell carcinoma patient, with acceptable outcome: (A) before surgery; (B) immediately after surgery; (C) 10 days after surgery and (D) 1 month after surgery

After excision, all flaws in this research were treated with an alginate dressing and a pressed bandage. Wounds rarely bled or adhered to the alginate dressing, making dressing changes simple. Three days later, the alginate dressing was removed and replaced with a foam dressing that was changed every 3-5 days. It can improve wound healing by providing a wet occlusive healing environment. The wound healed in 3 to 4 weeks, much to the delight of the patients. The aesthetic impact of nasal alar and tip is both good in this research patients, which may be connected to the application of the foam dressing, as it is best studied as an alternative to gauze and appears to be preferred in terms of pain reduction, patient satisfaction, and nursing time. The fundamental drawback of secondary intention healing is that it necessitates frequent dressing changes and the care of an open wound for an extended length of time. Furthermore, if utilised incorrectly, it may result in a negative cosmetic effect. ^[4] As a result, before employing the secondary intention healing approach, it is critical to select the appropriate condition and properly discuss with the patient.



Conclusion:

Finally, secondary intention healing of nose deformities produces a satisfying cosmetic result. Secondary intention healing is frequently disregarded in a period of advanced repair for major lesions. However, when contemplating surgical methods for nose defect reconstruction, secondary intention healing should still be considered.

Secondary intention healing of tiny nasal tip and ala defects in Chinese patients produced acceptable aesthetic results and should be incorporated into the surgeon's reconstructive algorithm.

Reference:

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Dermatomyositis Patients' Cutaneous Manifestations and Corresponding Dermoscopic Features

Introduction:

Dermoscopy (epiluminescence microscopy) is a noninvasive and simple technique for magnifying the skin in real time and seeing morphologic aspects that are undetectable to the human eye. ^[1] Nailfold capillaroscopy (NFC) is now regarded as the gold standard for detecting microvascular alterations in the nailfold region of rheumatic illness patients. Dermoscopy has been explored for gross investigation of capillary nailfold anomalies in various studies including individuals with collagen-vascular illnesses as a simpler and more accessible technology than NFC. ^[2]

Dermatomyositis (DM) is a rare connective tissue autoimmune disease that affects the skin, skeletal muscles, and internal organs. Although the pathophysiology is unknown, the immunological response is assumed to start from the endomysium's capillary endothelium. Capillary depletion, ischemia, muscle and skin injuries arise from activation of the complement system and deposition of C5b-9 membrane assault complexes. As a result, vascular skin alterations are essential for DM, and dermoscopy can reveal a range of vascular patterns.

Methods:

The current study aims to extend the use of dermoscopy in individuals with dermatomyositis (DM) beyond the standard nailfold inspection. It is also hypothesised that there is a clinico-dermoscopic link between clinical indications of skin affection and dermoscopic characteristics. Over a three-year period, 29 diabetic individuals were included in this descriptive prospective research. A DermLite DL1 dermatoscope in polarisation mode was coupled to a One Plus 3T camera to perform dermoscopy. Periungual affection, scalp DM, Gottron papules, palmar papules, poikiloderma, and auricular changes were all examined.

Results:

Dermoscopy revealed a high percentage of advanced nail fold capillary alterations, including large capillaries (79%), microhemorrhages (46%), and avascular regions (25%). Trichoscopic characteristics that were most common were enlarged tortuous capillaries (64%), interfollicular scales (50%) and peripilar casts and tufting (36%). Other skin lesions examined in this study were Gottron papules in 20 individuals, poikiloderma in 11, palmar papules in 4, and auricular lesion in 4.

Discussion:

Periungual alterations are a well-known indicator of cutaneous disease in diabetes. Periungual lesions are routinely investigated with NFC. Because the NFC pattern in DM is similar to that



seen in systemic sclerosis patients, it is described to as a "scleroderma-like pattern." NFC is a significant tool for clinicians since studies show that changes in nail-fold capillaries indicate disease activity in diabetes. [3] Scalp involvement is an often ignored clinical feature of diabetes, therefore its true prevalence is unknown. The majority of manuals and review papers characterise scalp DM as an erythematous, scaly, and occasionally pruriginous disease of the scalp, similar to seborrheic dermatitis or psoriasis. Nonscarring alopecia is frequently seen. The investigation only revealed one study that looked at scalp dermoscopy in diabetic individuals. [4]

Figure 1. (A and B) Disorganization of the normal capillary architecture. (C-G) Enlarged/giant capillaries (gray arrows), microhemorrhages (red arrows), loss of capillaries/large avascular areas (blue arrows). (H and I) Ramified/bushy capillaries (purple arrows). (J) Nailfold erosion covered with crust. (K and L) Ragged cuticles.	Figure 2. (A and B) enlarged tortuous capillaries. (C and D) Tufting (purple arrows), peripilar casts (blue arrows), perifollicular pigmentation (gray arrow). (E) Interfollicular scales. (F) Interfollicular pigmentation. (G) Vascular lake-like structure. (H) Bushy capillaries. (I) Perifollicular erythema. (J) Punctuate hemorrhages. (K) Broken hairs; (L) Pigtail hairs.	Figure 3. (A) Ulcerative Gottron papules. (B and C) Dermoscopy of Gottron papules. Note the circular appearance of the enlarged vessels in (C). Clinical (D) and dermoscopic pictures of palmar papules (E-G). Note how palmar papules are located on the two opposite sides of the joint. (H) Poikiloderma on dermoscopy. (I) Perifollicular erythema on dermoscopy. (J) Auricular erosions. (K and L) Telangiectasias and vascular lake-like structures of the auricle on dermoscopy.

The authors performed trichoscopy on 31 diabetic patients and determined that the presence of expanded capillaries (71.4%) was the most consistent observation in their patient group, followed by peripilar casts (57.1%), tufting, and interfollicular scaling (50%). The findings revealed a prevalence of the same dermoscopic traits in fourteen patients (64%), peripilar casts and tufting in eight patients (36%), and interfollicular scales in eleven patients (50%). Furthermore, the study discovered several hair shaft abnormalities (broken hairs, pigtail hairs) in the absence of other disorders that may cause such hair defects. There were no previous publications on hair shaft anomalies in diabetic individuals found in the research.

Dermoscopic images of Gottron papules and the Gottron sign are unspecific. It was possible to see irregular capillaries and scales on an erythematous backdrop. However, only a few unusual examples are recorded. Hasegawa reported dermoscopy-detected punctuate haemorrhages on the elbow of a patient with Gottron sign. The same patient developed a rapidly progressing



interstitial lung illness after testing positive for anti-melanoma differentiation-associated protein 5 (MDA-5) autoantibody. Another research revealed that in the context of aggressive interstitial pneumonia, punctate haemorrhages may be associated with vascular damage. The existence of skin ulcers and anti-MDA 5 antibody specificity in diabetic individuals is widely established. Despite this, ulcerative Gottron papules/Gottron sign are a rather uncommon occurrence. [5]

Antihelix/helix violaceous macules, erythematous auricular papules, and even tiny ear ulcerations have previously been documented in conjunction with the anti-MDA 5 antibody phenotype and have been recommended as a prognostic sign for catastrophic pulmonary illness.

Conclusion:

The researchers had three patients with notable auricular telangiectasias and one patient with both auricular vascular lake-like formations and erosions in this study group. Because the patient with auricular erosions is TIF1-positive, we believe that a pathogenetic mechanism other than vasculopathy may be involved in erosion production. One proposed explanation is vacuolar degeneration of the epidermis's basal layer.

Dermoscopy for clinical examination of skin lesions in DM improves diagnosis accuracy and elucidates previously unknown disease features.

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Seasonal Trends in Ambulatory Visit Burden in Patients with Hidradenitis Suppurativa

Introduction:

Hidradenitis suppurativa (HS) is a chronic, debilitating inflammatory skin illness characterised by painful nodules, abscesses, and tunnels, which are frequently found in intertriginous regions. Heat, friction, and perspiration have been found to exacerbate HS symptoms in patients with HS, particularly in warmer locations. Despite this, seasonal patterns in the ambulatory visit burden owing to HS are poorly understood. The study looked at the seasonal burden of ambulatory visits owing to HS in the US. ^[1]

Methods:

The National Ambulatory Medical Care Survey, a nationally representative database of ambulatory visits in the United States, was utilised in the study to analyse seasonal changes in ambulatory visits for patients with HS. SAS Studio 9.04.01 (SAS Institute, Cary, N.C., USA) was used for data analysis, and variation in the complicated survey design was accounted for by applying survey weights to provide national estimates and confidence intervals.

Results:

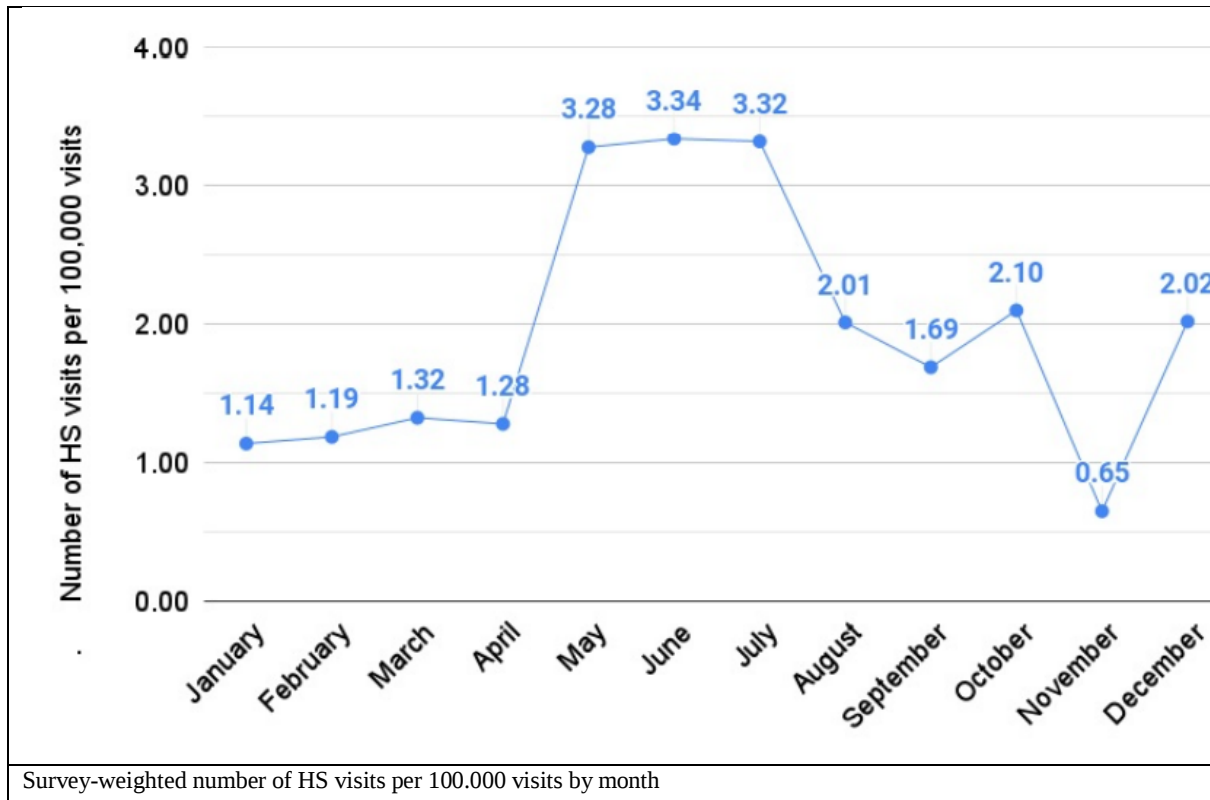
Between 2008 and 2018, the analysis identified about 2.33 million outpatient visits (95% confidence interval 1.95 million-2.71 million) with a diagnosis of HS. Approximately 21% of visits occurred from January to April, 51% from late spring to summer (May to August), and 28% from autumn (September to December). There was a significant difference in the number of visits between these three time periods ($\chi^2=13.1$, $p=0.0014$).

Discussion:

This nationally representative cohort demonstrates the increasing ambulatory load of HS patients from May to August. This corresponds to a larger burden of national emergency room visits throughout the summer owing to HS. ^[2] The temporal trends might be related to increased hyperhidrosis and friction in warmer regions, both of which patients have highlighted as aggravating aspects of HS that degrade quality of life. Sweating, heat, and activity are frequently reported as exacerbating HS variables by patients. Other skin disorders, such as acne, have also been linked to seasonal exacerbation. ^[3] Anticipation of seasonal illness load and adjustments in therapy, such as commencing or changing anti-hyperhidrosis drug dosing, may aid in disease control. ^[4] Botulinum toxin was found to ameliorate illness in certain HS



patients with or without concurrent hyperhidrosis in a comprehensive assessment of anti-hyperhidrosis therapy in HS. Clinicians may also advise patients on how to stay cool and avoid friction. It is particularly critical to continue monitoring patients' mental and emotional well-being throughout the warmer months, when flares may be more common.



Conclusion:

The findings of the study should assist dermatologists anticipate a higher burden of HS treatment throughout the late spring and summer months, ensuring continuing access to care and addressing potential season-related HS triggers like as hyperhidrosis early.

Awareness of the increased prevalence of HS during the summer months may aid in management, such as anticipatory counselling on strategic lifestyle changes and the commencement of anti-hyperhidrosis medicines.

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The Butterfly Sign in Scabies: An Evolutionary Process?

Introduction:

Human scabies is a global skin infection caused by the mite *Sarcoptes scabiei hominis* that is still a major public health problem. The discovery of the mite is critical for diagnosis, and entodermoscopy enhances diagnostic reliability significantly. Because of its refractile region placed between the buccal apparatus and the second set of legs, the mite is visible on dermoscopy near the burrow's head. This sign is also known as a "triangle" sign, a "delta glider" sign, or a "hang glider" sign. ^[1] On wet dermoscopy, the "triangle" indication is commonly accompanied by reflecting bubbles down the tunnel known as the "jet trail" sign. Other less often observed dermoscopic indications have been recorded, including the "gray-edge line" sign, which is caused by the presence of mite faeces containing melanin. ^[2] This study describes a novel dermoscopic sign discovered in two patients during the age of *Sarcoptes scabiei hominis*' growing resistance to traditional therapies.

Case Report:

The researchers looked at two cases of young patients (a 10-year-old male and a 5-year-old male) who were admitted to the dermatologic unit for scabies that had been present for several months and were treated with repeated cycles of permethrin 5% cream. Physical examination revealed persistent multiple mite burrows with classic dermoscopic image of "delta glider" sign (Figure 2, A-C, asterisk), corresponding to the anterior part of the mite (Figure 2, B-D, asterisk), associated with a new dermoscopic sign, which we

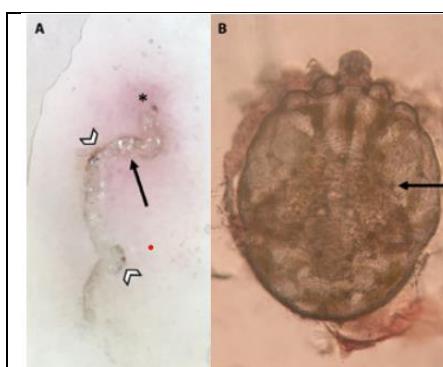


Figure 1. (A) Dermoscopy of a scabies burrow showing the "delta glider" sign (asterisk), reflective bubbles within the burrow referred to as "jet trail" sign (arrow) and blackish-gray lines at some points of the burrow walls consistent to the "gray-edge line" sign (arrowhead). (B) Microscopic examination of a *Sarcoptes scabiei hominis* with classical features: the gut area appears poorly demarcated and of the same color of the adjacent structures (arrow).

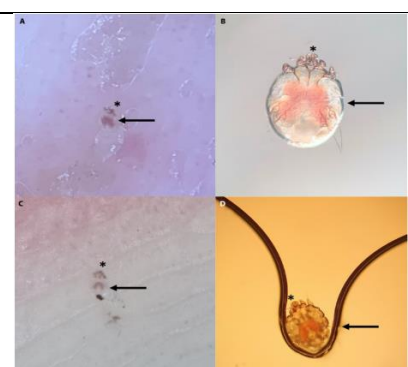


Figure 2. Dermoscopic evaluation of a scabies burrow of the 5-years old patient (A) and of the 10-years old patient (C) with the corresponding microscopic appearance of the scraped mites (B and D). (A-C) Both dermoscopic images show the "delta glider" sign (asterisks) and the presence, just below, of a reddish structure corresponding to the "butterfly" sign (arrows). (B-D) Microscopic features of the anterior part of the mite body (asterisks) and of the underlying gut area which appear well demarcated and reddish in color (arrows).

called the "butterfly" sign, characterised by a butterfly-shaped reddish area just below the "delta glider" sign (Figure 2, B-D, asterisk) (Figure 2, A-C, arrow).



The microscopic inspection of the scraped skin in the vicinity of the burrow revealed the existence of the mite with a well-defined butterfly-shaped stomach region and a crimson colouring resembling blood in both individuals (Figure 2, B-D, arrow). It should be noted that the stomach region of the *Sarcoptes scabiei hominis* mite is not always readily visible under the microscope (Figure 1B, arrow).

Discussion:

Several writers have recently documented the rising issue of mite resistance to traditional treatments, particularly permethrin, as in these examples ^[3].

Conclusion:

This study offers a new dermoscopic sign as a potential marker of *Sarcoptes scabiei hominis* progression based on these unique findings.

Given these novel findings, this study proposes a new dermoscopic sign as a prospective marker of *Sarcoptes scabiei hominis* progression.

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