

Diverse skin cases: Diagnosis, management, genetics.

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Introduction

Dermatology presents continuous diagnostic challenges, often requiring meticulous examination and advanced tools. A patient presenting with an unusual annular rash, ultimately diagnosed as cutaneous sarcoidosis, highlights the diagnostic complexities associated with atypical sarcoidosis presentations, emphasizing the importance of biopsy and histological examination to confirm diagnosis and guide appropriate management when initial clinical signs are misleading[1]. Similarly, an infant with an atypical linear nevus sebaceous of Jadassohn illustrates the diverse spectrum of congenital skin lesions, reinforcing the need for careful clinical examination and histopathological correlation to accurately diagnose and manage such cases in pediatric dermatology[4]. Further complicating diagnosis, cutaneous *Mycobacterium marinum* infection mimicked sporotrichosis in an immunocompetent patient, stressing the importance of considering atypical mycobacterial infections in sporotrichoid lesions, especially with aquatic exposure, requiring specific microbiological culture for accurate identification[9].

The skin often provides critical clues to underlying systemic diseases or rare genetic disorders. A rare presentation of generalized eruptive histiocytoma in a patient with Systemic Lupus Erythematosus (SLE) suggests a potential association. This highlights the importance of considering atypical skin manifestations in SLE patients and the need for thorough dermatopathological evaluation to distinguish such lesions from other inflammatory or neoplastic processes[3]. Recurrent vesiculobullous lesions on the palms and soles served as an initial manifestation of SLE. These uncommon cutaneous findings are a rare but important diagnostic clue for underlying systemic lupus erythematosus, prompting clinicians to consider SLE even with atypical dermatological presentations[8]. Moreover, the phenotypic variability and genotypic complexity of inherited skin blistering disorders are profound, as shown by a rare case of epidermolysis bullosa simplex with pyloric atresia, caused by a novel truncating mutation in the *PLEC* gene. This stresses comprehensive genetic testing for precise diagnosis and genetic counseling in affected families[10].

Therapeutic interventions and their associated risks are another crucial aspect of dermatological care. A report details refractory ulcerative necrobiosis lipoidica successfully treated with ustekinumab

after failing conventional therapies. The patient experienced significant improvement in symptoms and wound healing, suggesting that ustekinumab, an IL-12/23 inhibitor, could be an effective alternative treatment option for severe, recalcitrant forms of this debilitating skin condition[2]. Conversely, while targeted biological therapies are generally well-tolerated, they can rarely trigger serious adverse drug reactions. A severe case of Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) syndrome was observed in a patient receiving tocilizumab for rheumatoid arthritis, underscoring the importance of vigilance for such systemic manifestations even with these advanced therapies[5].

Finally, understanding immunological triggers and the aggressive nature of certain malignancies is paramount. Generalized pustular psoriasis was triggered by a COVID-19 mRNA vaccine in one notable instance. This observation points to potential immunological mechanisms linking vaccine administration with the onset or exacerbation of autoimmune skin conditions, adding to the growing body of knowledge on vaccine-related adverse events and informing clinical practice for managing patients with pre-existing inflammatory dermatoses[6]. Lastly, primary cutaneous malignant melanoma of the sole rapidly led to extensive metastasis to the brain. This critical insight into the aggressive nature and poor prognosis associated with acral lentiginous melanoma, particularly on weight-bearing surfaces, underscores the necessity for early detection and aggressive management strategies to improve patient outcomes[7].

Conclusion

A patient presenting with an unusual annular rash was diagnosed with cutaneous sarcoidosis, highlighting diagnostic challenges in atypical cases and the need for biopsy. Refractory ulcerative necrobiosis lipoidica responded well to ustekinumab, suggesting it as a viable treatment for severe forms. Generalized eruptive histiocytoma in an SLE patient indicates a potential association, requiring thorough dermatopathological evaluation. An infant with atypical linear nevus sebaceous of Jadassohn underscores the diverse spectrum of congenital lesions and the importance of clinical and histopathological correlation in pediatrics. A severe DRESS syn-

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drome case in a patient on tocilizumab emphasizes vigilance for systemic adverse drug reactions with biologics. Generalized pustular psoriasis triggered by a COVID-19 mRNA vaccine points to immunological links between vaccines and autoimmune skin conditions. Primary cutaneous malignant melanoma of the sole with rapid brain metastasis stresses the aggressive nature and poor prognosis of acral lentiginous melanoma, necessitating early detection. Recurrent palmar and plantar vesiculobullous lesions as an initial manifestation of SLE serve as a crucial diagnostic clue for underlying systemic disease. Cutaneous *Mycobacterium marinum* infection mimicking sporotrichosis in an immunocompetent patient highlights the need for specific microbiological culture in aquatic exposure cases. A rare epidermolysis bullosa simplex case with pyloric atresia, caused by a novel PLEC gene mutation, demonstrates phenotypic and genotypic complexity, emphasizing comprehensive genetic testing and counseling.

References

1. Amany TS, Abeer A, Reham ES. Cutaneous Sarcoidosis Presenting as an Annular Rash: *A Diagnostic Challenge*. *Case Rep Dermatol*. 2021;13:162-167.
2. Christina TT, Michael DZ, Aaron NH. Refractory Ulcerative Necrobiosis Lipoidica Treated with Ustekinumab: *A Case Report*. *Case Rep Dermatol*. 2022;14:124-129.
3. Xiaohui F, Xiaojing Z, Ying Z. *Generalized Eruptive Histiocytoma Associated with Systemic Lupus Erythematosus*. *Case Rep Dermatol*. 2023;15:159-163.
4. Amrita N, Garima Y, Monika B. *Atypical presentation of linear nevus sebaceous of Jadassohn in an infant*. *Indian J Dermatol Venereol Leprol*. 2024;90:97-98.
5. Yu-Hung W, Tzu-Min L, Chih-Hsueh L. *Severe Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) Syndrome in a Patient Receiving Tocilizumab for Rheumatoid Arthritis*. *Case Rep Dermatol*. 2023;15:363-368.
6. Yan-Ni W, Wei H, Yu-Jun L. *Generalized Pustular Psoriasis Triggered by COVID-19 mRNA Vaccine: A Case Report and Literature Review*. *Case Rep Dermatol*. 2022;14:305-312.
7. Xiao-Ying F, Hai-Ying M, Li-Na Q. *Primary Cutaneous Malignant Melanoma of the Sole with Extensive Metastasis to the Brain: A Case Report*. *Case Rep Dermatol*. 2021;13:383-389.
8. Hanako S, Tomoyo F, Akihiro O. *Recurrent Palmar and Plantar Vesiculobullous Lesions as a Presentation of Systemic Lupus Erythematosus*. *Case Rep Dermatol*. 2023;15:174-178.
9. Xiaofeng C, Linfeng W, Bin Z. *Cutaneous Mycobacterium marinum Infection Mimicking Sporotrichosis in an Immunocompetent Patient*. *Case Rep Dermatol*. 2022;14:202-207.
10. Jing Z, Mingli X, Li L. *Epidermolysis Bullosa Simplex with Pyloric Atresia Caused by a Novel Truncating Mutation in the PLEC Gene*. *Case Rep Dermatol*. 2023;15:238-244.

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