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Case Report

Hydroa vacciniforme mimicking eczema herpeticum: a rare case report

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ABSTRACT

We report case of a 13-year-old male patient with characteristic clinical findings of a rare photodermatoses-hydroa vacciniforme supported by dermoscopy and laboratory investigations. Despite its characteristic presentation, it may mimic other photodermatoses and infectious conditions, making careful clinical assessment essential. Dermoscopy served as a valuable adjunct in reinforcing the diagnosis, especially when biopsy was not feasible. The patient demonstrated rapid improvement with systemic steroids, vitamin D supplementation, sunscreen and strict photoprotection, underscoring the importance of early recognition and appropriate management. Given its rarity, this case adds to the limited literature and emphasizes the critical role of clinical suspicion and dermoscopy in diagnosing hydroa vacciniforme.

Keywords: Hydroa vacciniforme, Photodermatoses-hydroa vacciniforme, Dermoscopy

INTRODUCTION

Hydroa vacciniforme is a rare and underrecognized pediatric photodermatoses, with an estimated prevalence of 0.1-0.5 cases per 100,000 per year. It presents with vesicular eruptions on photoexposed areas that resolve with vacciniform or varioliform scarring and may clinically resemble other benign dermatoses. The condition often undergoes spontaneous remission during late adolescence.[1]

Management options are limited, with strict photoprotection remaining the cornerstone of therapy.[2] This case underscores the significance of a combined clinical and dermoscopic evaluation for accurate diagnosis and timely initiation of treatment, resulting in rapid improvement of lesions.

CASE REPORT

We present a 13-year-old male patient who presented to dermatology OPD of a tertiary care center with chief complaints of multiple fluid filled lesions over face and neck since one week. The lesions were associated with moderate itching developed into hemorrhagic crusted lesions. Previous history of similar complaints was present with exacerbations in summer season since last the two years.

The patient was treated on lines of eczema herpeticum with systemic antivirals by the local practitioner. But there was no improvement, instead lesions kept on increasing with time.

Clinical examination revealed few discrete clear fluid vesicles, multiple brownish hemorrhagic crusts and hypopigmented scars over mainly over the face and neck.

Few lesions were present on dorsum of bilateral hands and distal forearms (Figure 1 A-D). There was no mucosal involvement.

On dermoscopy, structureless pinkish white areas, yellowish brown scaling, surrounded by irregular brown pigmentation was observed (Figure 2).

Figure 1 (A-D): Few lesions were present on dorsum of bilateral hands and distal forearms.

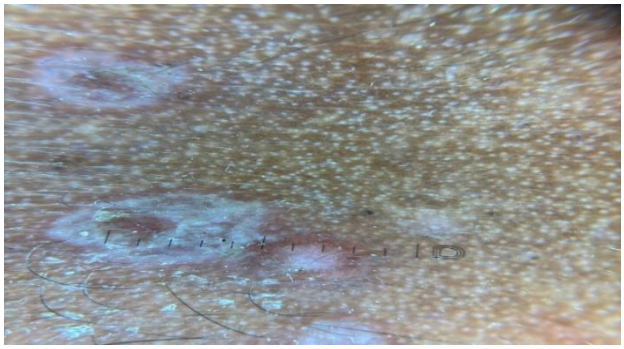

Figure 2: Dermoscopy.

All routine investigations were normal and HSV IgG and IgM were also negative. Serum vitamin D3 levels were below the normal range. Serum antinuclear antibodies were negative. Consent for biopsy was not given by the patient. Based upon the history and examination final diagnosis of hydroa vacciniform was made and the child was treated with oral methylprednisolone 8 mg daily for 5 days and vitamin D supplementation. Topical sunscreen and strict photoprotection was also advised. After follow up of one-week significant improvement in the symptoms and lesions was observed (Figure 3 A-C).

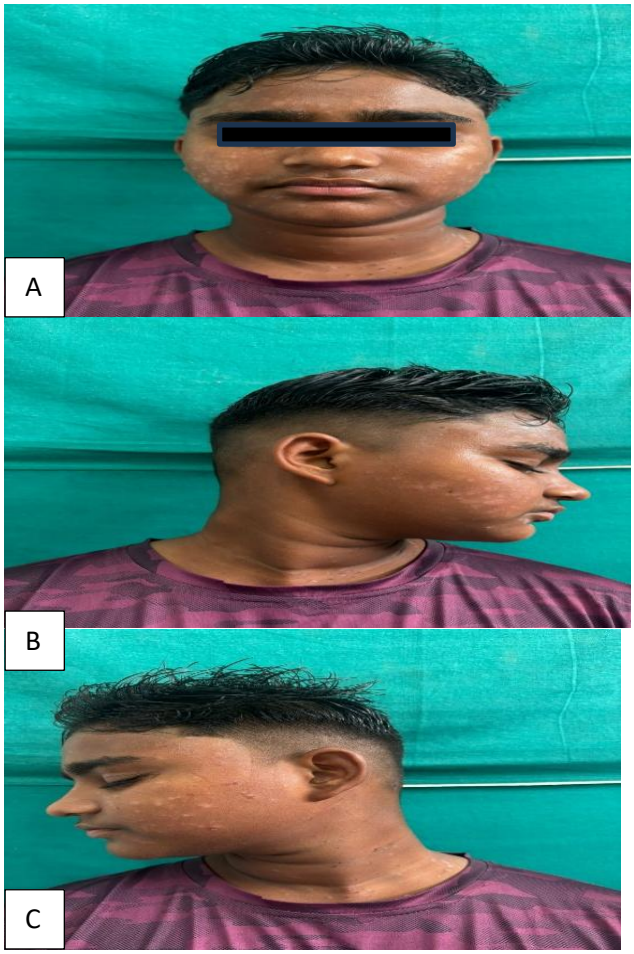

Figure 3 (A-C): Significant improvement in the symptoms and lesions was observed.

DISCUSSION

Hydroa vacciniforme is a rare childhood photodermatoses with less than 10 cases reported on PubMed in the past 10 years. It begins during childhood or early adolescence and usually resolves by young adulthood.[2] It appears to have a slight male predominance.[1]

The etiology of hydroa vacciniform is multifactorial-affected by immune, genetic, and environmental influences and is associated with Epstein-Barr virus, an enveloped double-stranded DNA virus with a preference for infecting B lymphocytes.[2] Two reports of HV in siblings have been documented, suggesting a genetic component to hydroa vacciniforme.[3]

The condition predominantly involves sun-exposed sites-face, forearms or hands. Clinically, it is chronic and relapsing disease in which ultraviolet exposure leads to vesiculation, crusting and then healing with distinctive varioliform scarring.[1]

While often self-limiting with improvement by adolescence, atypical and more severe cases have been described, including ocular complications, deformities of the ear or nose, and even finger contractures. Prognosis is largely guided by the clinical picture.[1]

The differential for hydroa vacciniforme encompasses several photoinduced blistering conditions, including erythropoietic protoporphyria, bullous lupus erythematosus, solar urticaria, hydroa aestivale, and porphyria cutanea tarda. In our case multiple vesicles on erythematous base and brownish crusting involving predominantly face and neck beard resemblance to eczema herpeticum but the child was unresponsive to systemic antivirals advised previously by local practitioners and HSV IgG and IgM were also negative.

In this case, the combination of thorough clinical and dermoscopic evaluation and targeted laboratory testing supported a definitive diagnosis of Hydroa vacciniforme and excluded these alternative possibilities.

Various treatment modalities have been tried for Hydroa vacciniforme along with strict photoprotection. Oral antimalarials and beta-carotene are among the most commonly used treatments and may offer some benefit, particularly when combined with strict sun avoidance. Other therapies reported with variable success include narrowband UVB or PUVA phototherapy, oral glucocorticoids, azathioprine, cyclosporine, thalidomide and fish oil supplementation.[3] In this case response to oral steroids, Vitamin D supplements and sunscreens was very effective.

CONCLUSION

This case report presents hydroa vacciniforme, a rare pediatric photodermatoses that may resemble various photosensitive and infectious dermatoses. It further documents the dermoscopic features of the condition, which have been rarely reported in the literature. High clinical suspicion is required for early recognition and timely diagnosis for an excellent therapeutic response.

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REFERENCES

1. Guechchati M, Baybay H, Zeryouhi M, Elousrouti LT, Mernissi F, Zaryouhi M. Hydroa Vacciniforme: A Rare Pediatric Photodermatosis. Cureus. 2025;17(4):e82079.
2. Levoska MA, Cohen JI, Manoli I, Lee CC, Ching SS, Shand J, Tamura D, Kraemer KH, DiGiovanna JJ. Recurrent scarring papulovesicular lesions on sun-exposed skin in a 22-year-old man. J Am Acad Dermatol. 2018;78:637-42.
3. Dhillon KS, Singh T, Sharma D, Varshney KR, Garg N, Priya P, Fatima U, Chawla S. Hydroa vacciniforme: a very rare photodermatosis. Int J Adv Med. 2014;1:149.

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