

CASE REPORTS

LOCALISATION OF VARICELLA LESIONS AROUND PYODERMA; A DISTINCT PHENOMENON ?

B C Ravikumar , C Balachandran

The knowledge about the localisation of skin lesion can be a key to diagnose and to understand the underlying mechanism of many skin diseases. Two phenomena? "isomorphic response of Koebner" and "isotopic response" have been described in this regard. Here we report a case of varicella showing a phenomenon partially akin to both isomorphic and isotopic responses but with certain distinct variations.

Key words : Varicella, Pyoderma, Isotopic

Introduction

Understanding of the localisation of skin lesion is a key to diagnose many skin diseases. Two phenomena have been described in this regard. The "isomorphic response" means the occurrence of an already existing skin disease at a site of an injury¹ and the relatively new concept of the "isotopic response" denotes occurrence of a new unrelated disease at the same location as a previously existing but already healed disease.² In other words isotopic means "at the same place" and isomorphic means "the same morphology" (as the existing disease). As more and more is known about skin diseases, several new terms and variations in the existing terms have been necessitated thereby making the search for the mechanism of the diseases possible. Here we report a case of varicella showing a phenomenon akin to both isomorphic and isotopic responses with certain variations.

From the Department of Skin and STD, Kasturba Medical College and Hospital, Manipal -576119, India.

Address correspondence to :

Prof. C Balachandran

Case Report

A 26-year-old student presented with typical lesions of varicella over the trunk and face of 3 days duration. The lesions on the extremities were very few when compared to those of trunk and face. He also had a



Fig. 1. Vesicular and crusted varicella lesions around a healing pyoderma lesion.

pyoderma over the dorsum of left foot which followed a traumatic injury 1 month back. Tzanck smear from the vesicles demonstrated multinucleated giant cells confirming the clinical impression of varicella. The patient was treated with acyclovir, antibiotic and antipyretic tablets. After 2 days, fever subsided but a few new

lesions continued to appear. On the 3rd day, several lesions were found to be located unusually around the pyoderma on the dorsum of left foot (Fig.1). Tzanck smear from these lesions also demonstrated multinucleated giant cells. There were very few lesions on the other parts of the extremities. Subsequently, all the lesions including the pyoderma healed in about 2 weeks.

Discussion

The localisation of varicella lesions particularly at the site of pyoderma in our patient may resemble isotopic response. But unlike as expected for the isotopic response, the pyoderma lesion was yet to heal, the vesicular lesions were seen around the pyoderma instead of over the lesion and moreover the isotopic response of varicella lesions on a pyoderma site has not been reported though there are reports for the contrary.² The occurrence of new varicella lesions at the site of injury also appears to resemble the isomorphic response. But the injury was older than the disease itself and importantly the isomorphic response has not been reported in varicella so far.

The characteristic response seen in this patient may be a variant of either isotopic phenomena or it may

be a distinct as like the other two. The reasons for the site preference of the two diseases involved is not clear. But as Jackson³ suggested, certain areas of the body offer little resistance to invasion by microorganisms and/or toxins or the pyoderma might have caused some immunological changes that made the site vulnerable to a second disease² or as suggested for koebners phenomenon the skin once inflamed may tend to remember the experience and localise future insults to that area.⁴ However for the time being this phenomenon and the conclusions about its pathomechanism are tenuous at best and needs to be learned further.

References

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