Chronic Urticaria at the Site of Healed Herpes Zoster: Wolf's Isotopic Response

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ABSTRACT

Wolf's isotopic response is the phenomenon which a new skin disease appears at the site of previously healed unrelated dermatosis. Due to its rarity, we reported a case of chronic urticaria at previously healed herpes zoster leading to the diagnosis of wolf's isotopic response. Herpes zoster DNA was undetectable from our skin biopsy. We postulate that aberrancy of injured nerves cause this phenomenon rather than the virus itself.

Key words: Wolf's isotopic response, isotopic response, herpes zoster, urticaria, herpes DNA

INTRODUCTION

Wolf's isotopic response was used to describe the new disease appearing at already healed unrelated dermatosis. Herpes zoster is the most common primary skin disease of this phenomenon (Wolf et al., 1995). Several rare forms of skin diseases occur at the site of healed herpes zoster such as comedones, morphea, lichen planus, furuncles, cutaneous mucinosis, linear IgA dermatosis, rosacea, erythema annulare centrifugum, granuloma annulare, granulomatous folliculitis and Trichophyton rubrum folliculitis (Sanchez-Salas, 2011; Ghorpade, 2010a; Forschner et al., 2005; Ghorpade, 2010b; Kim et al., 2009; Goksugur, 2008; Sezer et al., 2006; Ruocco et al., 2003; Schena et al., 2001; Tuzun et al., 2000).

Only one case of chronic urticaria at the site of healed herpes zoster was reported previously (Lee et al., 1999). We present here an additional case of chronic urticaria developing at the site of previously healed herpes zoster because of its rarity.

CASE REPORT

A 65 year-old Thai man presented with 2-month history of recurrent pruritic annular and polycyclic erythematous urticarial-like plaques. They resolved within 2-3 days and lefted normal skin. The lesions mostly recurred at the site of his healed herpes zoster with post-herpetic neuralgia (Fig. 1, 2). These eruptions were generally preceded by much more intense post-herpetic pain as a warning sign. The duration between healing of herpes zoster after being treated with oral acyclovir and the onset of these lesions was about 8 months. Severe post-herpetic neuralgia presented but no herpetic scar was seen. Skin biopsy was done and consistent with urticaria. Work up for occult infections and abnormal immunology came up with unremarkable results. Results of PCR for HSV from lesional and control normal skin were all negative.

DISCUSSION

Wolf's isotopic response is the phenomenon which the second new unrelated skin disease occurs on the site of the previously healed primary one. Herpes zoster is the most common primary disease reported. The gap between primary and subsequent disease vary from weeks to years. Regarding
Fig. 1: Chronic urticaria at the site of previously healed herpes zoster in the first visit

pathogenesis of this phenomenon, many hypotheses have been proposed such as viral, immunological, neurological and vascular etiologies (Ruocco et al., 2002). In some previous cases of postherpetic isotopic disorders, as well as in that of the present report, a study by PCR was performed to search for HZV DNA in tissue samples of the isotopic disease. HZV DNA was not found in any of the cases (Requena et al., 1998). However, the HZV DNA was detected when the duration between HZV infection and the secondary disease was less than 4 weeks (Serfling et al., 1999). From our case, we postulate that wolf’s isotopic chronic urticaria is related to aberrancy from nerve injury caused by Herpes zoster virus rather than the virus itself.
REFERENCES