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Prurigo simplex subacuta or prurigo simplex acuta?

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Key words
Prurigo simplex subacuta; prurigo simplex acuta; childhood

Summary
Prurigo is a condition of nodular cutaneous lesions that itch intensely. Prurigo lesions are divided into acute, subacute and chronic forms that itch intensely. Subacute prurigo (SP) clinically presents as excoriated papules mostly in a symmetrical distribution on the extensor surfaces of the extremities, neck, lower trunk, and buttocks. It tends to occur in middle-aged patients, especially in women. Herein, we described prurigo simplex subacuta in a 4-year-old boy. It was histopathologically documented.

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Introduction

The lesions of prurigo simplex subacuta may be disseminated, or they may be acneiform, or localised on the extremities only (1). Prurigo denotes of a papular and⁄or nodular condition that itches intensely. Clinically, it appears as excoriated papules mostly in a symmetrical distribution on the extensor surfaces of the extremities, neck, lower trunk, and buttocks. It predominantly affects middle-aged women, and may be associated with internal disorders such as diabetes mellitus and atophy, and renal as well as liver insufficiency appears to exist (2-6).

Case report

A 4-year-old boy presented with a 2-month history of intense pruritus and excoriated papules on trunk and extremities. On physical examination, some of the excoriating erythematous lesions, crusted papules, and small nodules were found predominantly on the abdomen and on lower extremity, especially below the knee (**figure 1**). There was no difference between day and night symptoms, no connection to foods, drugs, bite of insects, and other family members had no similar symptoms. In medical history he had no endogenous (e.g. diabetes mellitus, hypertension) or skin diseases (e.g. atopic dermatitis). Laboratory blood investigation revealed normal level of IgE; 28.8 (0-90 iu/mL) and eosinophilia (5.7%, 490 eosinophils/mm^3). 23 parameters skin prick test was negative. A skin punch biopsy was performed from the abdominal lesions, and histopathologic examination showed hyperkeratosis and parakeratosis covered with stratified squamous epithelium skin tissue fragment, perivascular mononuclear cells infiltrates, proliferation of vascular endothelial, and also extravasated erythrocytes in the upper dermis. Toluidine blue staining showed that number of the mast cells was within the normal histological range (**figure 2**). The diagnosis was

prurigo simplex subacuta. The patient was observed for several months with antihistamines and topical treatments, and clinical improvement was seen. With this treatment, skin lesions started to heal and pruritus decreased considerably.

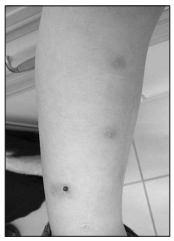

Figure 1 *- Excoriated erythematous lesions and crusted papules on lower extremity.*

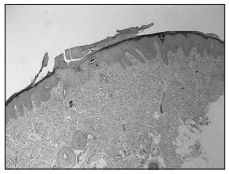

Figure 2 *- Skin punch biopsy, lesional histopathologic examination, hyperkeratosis and parakeratosis covered with stratified squamous epithelium skin tissue fragment. Perivascular mononuclear cells infiltrates, proliferation of vascular endothelial, also extravasated erythrocytes in the upper dermis.*

Discussion

Subacute prurigo, a term more commonly used in Europe and Japan, is a group of similar diseases: prurigo simplex subacuta, "itchy red bump" disease, and Rosen's papular eruption in black men. It tends to occur in middle-aged patients, especially in women, who present comorbidity with psychiatric disorders and emotional overlap (5). Increased numbers of mast cells, Merkel cells and proliferation of sensory nerve fibres found in affected skin may together be responsible for the abnormal perception of itch and touch (7). Sometimes SP was seen with internal diseases such as diabetes mellitus, hypertension and/or renal disease (8). Prurigo simplex subacuta is characterized by intensely pruritic, erythematous urticarial papules. Some patients may have an atopic background or may exhibit dermographism (3). Exogenous toxic factors such as parasites, bacteria, topically or orally administered drugs deposited on the skin can induce itching (9). In our case, there was no history for insect bites, bacterial and parasitic toxic factors. In literature, a subacute prurigo variant of bullous pemphigoid that clinically resembles subacute prurigo was described (10). Differential diagnosis of prurigo simplex subacuta is prurigo simplex acuta (insect bites), dermatitis herpetiformis (can be excluded by the absence in prurigo simplex of neutrophilic microabscesses at the tips of dermal papillae and neutrophils, eosinophils, and nuclear dust in the dermal infiltrate), subacute eczematous dermatitis, urticarial bullous pemphigoid (3), dermatographism / physical urticaria (5). Our patient had no evidence of systemic disease or exogenous factors, and prurigo simplex acuta and dermatitis herpetiformis were excluded. Clinically as well as histopathologically prurigo simplex subacuta was proven, and we couldn't find any underlying etiology. We accepted that it was idiopathic prurigo simplex subacuta.

We would like to draw attention on prurigo simplex subacuta, which should be considered in the differential diagnosis of prurigo simplex acuta (insect bites), which was seen common in children.

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