The Baboon Syndrome: A Manifestation of Haematogenous Contact-type Dermatitis

Sir.

Haematogenous contact eczema, a type IV reaction triggered from the inside, can be induced orally by drugs acting as contact allergens in sensitized persons. The word "baboon syndrome" is used to denote a characteristic distribution pattern of systemic allergic contact dermatitis. The term refers to the skin lesions, which are compared to the red gluteal region of the baboon. Diffuse light-red erythema of the buttocks, upper inner surface of the thighs, and axillae is a typical clinical feature, which is highly characteristic and diagnostic. We present a case provoked by amoxicillin.

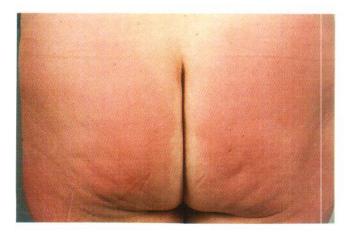
CASE REPORT

A 60-year-old woman was admitted from the department of internal medicine, where she was treated for pancreas carcinoma and cholestasis. Six days prior to her visit to our clinic she had been treated with amoxicillin 1000 mg for 10 days. An erythema of the underpants area and all major flexures developed 24 h later. Examination on admission revealed a light-red, maculopapular rash symmetrically distributed on the buttocks (Fig. 1) and major flexures, becoming confluent. Pruritus or burning sensation was relatively mild. A similar dermatosis had developed 8 years earlier following the use of an unknown oral antibiotic.

Histological examination of a punch biopsy from the right buttock showed sparse superficial perivascular lympho- and histiocytic infiltration. There was no involvement of the epidermis or signs of leukocytoclastic vasculitis. PAS-stain for fungi was negative.

Closed patch tests were performed on the upper back using Finn chambers on Scanpor tape. The reactions were read according to the recommendations of the International Contact Dermatitis Research Group (ICDRG) (1). The closed patch test on the back with amoxillin 5% in pet. gave a strong oedematous reaction after 48 h.

All other tested substances, including further drugs and the European standard series, gave negative reactions after 48 and 72 h. Prick tests and intracutaneous tests with amoxicillin, penicillin G, semisynthetic penicillins and further antibiotics were also negative. After the treatment with amoxicillin had been stopped the rash disappeared within 3 days.



DISCUSSION

The baboon syndrome, which mimics, because of its distribution, a textile dermatitis from underwear or the classical seborrhoeic dermatitis of the elderly, is an allergic type IV reaction to systemically administered allergens caused by haematogenous spread of the allergens. The term baboon syndrome was first introduced by Andersen et al. (2) after they had seen a series of cases with the typical clinical features. The characteristic clinical feature is a light-red erythema predominantly located in the major flexural areas of the extremities and on the buttocks. The onset is acute, ranging from only a few hours to 2–5 days after oral exposure to the allergen (3, 4). Our patient showed the characteristic features of this haematogenous contact dermatitis.

This kind of dermatitis is a type IV reaction triggered from the inside, which can be induced orally by components acting as contact allergens in persons previously sensitized to them. These components may cause a flare of dermatitis, a flare of patch test reaction, a dyshidrotic reaction of the fingers or a systemic contact dermatitis (5). The role of delayed-type cell-mediated immune reactions in contact drug hypersensitivity is well established, but the importance of such mechanisms involving specific effector lymphocytes in other varieties of cutaneous drug allergy is uncertain (6). The characteristic distribution of the generalized eruption may be diagnostic, with a diffuse erythema of the buttocks and an erythema of the upper inner surface of the thighs, possibly accompanied by erythema of the axillae. The baboon syndrome has been reported after systemic exposure to mercury, mostly appearing a day or two after breaking a clinical thermometer or during dental treatment, drugs like nickel, ampicillin, amoxicillin, and heparin or food additives (2-4, 7-9). Our patient had the characteristic features and clinical course after treatment with amoxicillin, like the patient of Herfs et al. (3). The histological changes are not specific. In all cases exept one (2) there was only a sparse superficial perivascular lymphohistocytic infiltrate. Andersen et al. (2) described a leuko-cytoclastic vasculitits. The differential diagnosis of baboon syndrome includes allergic contact dermatitis (e.g. textile dermatitis), other drug eruptions and viral exanthema. However, they do not all display the typical distribution of skin lesions. Baboon syndrome should be considered in the differential diagnosis of all light-red erythematous eruptions on the buttocks and the major flexural areas of the extremities. We believe that the incidence of this specific disease is more frequent than has been reported, since the condition may be overlooked.

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