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Infectious Mononucleosis (Glandular Fever) Complicated by Cold Agglutinins, Cold Urticaria and Leg Ulceration

J. H. Barth

Department of Dermatology, Wycombe General Hospital, High Wycombe, Bucks HP11 2TT, England

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Abstract. A 19-year-old female is described, whose glandular fever was complicated by cold agglutinins, cold urticaria and leg ulceration. This has not been described before, despite the well recognized occurrence of cold agglutinins.

Glandular Fever (Infectious Mononucleosis) is a common disease affecting young adults. It produces a benign febrile illness and is associated with numerous complications outside the bone marrow and reticulo-endothelial system. We report here a patient presenting with transient cutis marmorata, cold agglutinin antibodies, cold urticaria and leg ulceration.

CASE REPORT

A plump 19-year-old girl presented with a history of having had a sore throat 8 days earlier followed 2 days later by a faint rash all over her body. Three days after this she noticed 'purple lumps' on her legs. When first seen she had cutis marmorata involving the thighs and lower legs and some large bullae on both calves. She was given a course of Ampicillin and was admitted 3 days later when she was found to have cervical lymphadenopathy, a tonsillar slough, a maculo-papular eruption involving most of the body, cutis marmorata on her legs and irregular scabbed ulcers at the site of the bullae on both lower legs. The 'purple lumps' were seen to be urticarial wheals which occurred on exposure to the cold and which lasted in all for about 5 weeks; her leg ulcers had healed completely by 12 weeks.

Investigations

Haemoglobin 12.1, white cell count 6.8 (50% atypical mononuclear cells); Paul Bunnell positive, film displayed marked agglutination. Creatinine 51; SGOT 110; Proteins 76.1 g/l; cold agglutinins, positive; cryoglobulins, negative; throat swab—no pathogens; MSU, no cells or growth; ASO titre. 40 units/ml; smooth muscle antibodies +++. Rose-Waaler, 1.32; IgM 5.4 (0.5–1.6; IgE>1 100 (N>200). Cold agglutinins, negative one month later.

Skin biopsy showed acute ulceration with no evidence of vasculitis.

DISCUSSION

Glandular fever is frequently associated with cold agglutinins; indeed, Worledge & Dacie demonstrated a 50% incidence. However, our own laboratory experience is an approximately 1% agglutination as seen on routine film. Very rarely do symptoms occur. Cold agglutinins are a minor cause of cold urticaria, which itself is found in only 1% of urticarias (Champion et al., 1969). No biopsy evidence of vasculitis was found in the dermal vessels such as was found in cases of chronic cold urticaria by Eady et al. Leg ulceration has not apparently been reported previously as a complication of cold agglutination and glandular fever.

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The Atopic Thigh: A 'Starting-School' Symptom?

Torsten Fredriksson and Jan Faergemann

Department of Dermatology, Central Hospital S-721 89 Västerås, Sweden

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Abstract. In a retrospective survey of 1112 patients with atopic dermatitis we found that the age of onset of lesions localized to the lower gluteal and posterior femoral regions reached its peak at the age 7 to 8 years. We speculate that this is due to sweat retention caused by prolonged sitting when these predisposed individuals start school.

Key words: Atopic dermatitis: Thigh: Incidence

In patients with atopic dermatitis, lesions localized to the lower gluteal and posterior femoral regions are not uncommon. However, we had an intuitive feeling that this localization was not frequent among younger children but started to increase rapidly at the ages 6–8 years, or about the age when children start school in this part of the world. In order to try to prove this point we performed a retrospective survey of all children with atopic dermatitis who had visited this clinic during a 10-year period.

MATERIAL AND METHODS

The material included all patients below 15 years of age with atopic dermatitis who had visited this clinic during the years 1970–79 and who fulfilled all criteria of this disease as defined by Solomon (3). This material consisted of 1112 patients, 589 females and 523 males. Of these only those with definite localization to the lower gluteal *and* the posterior femoral region and with definite information as to age at onset of lesions were included in the study. This final material consisted of 143 patients, 73 females and 70 males.

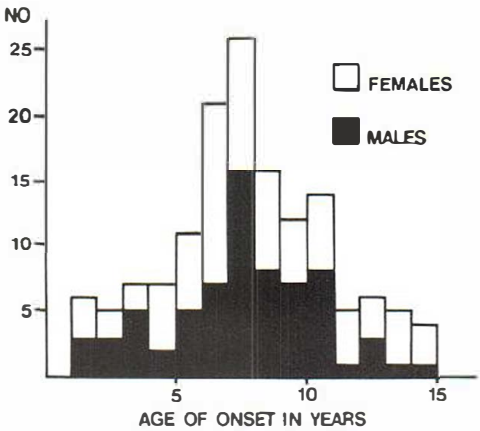

Fig. 1. Age at onset of atopic dermatitis localized to the lower gluteal and posterior femoral regions.

RESULTS

The results are summarized in Fig. 1. The incidence of atopic dermatitis localized to the back of the thighs, as illustrated in Fig. 2, starts to increase at the age of 6 years and reaches a peak at 8 years. Thereafter there is a gradual drop. This was never the only manifestation of the disease and never the first. There were no sex differences, and type of clothing did not seem to have any influence. Lesions usually started to appear for the first time in the autumn. There was no correlation between the duration of disease and this manifestation.

DISCUSSION

We are aware of the fact that this study, like all retrospective studies, has several inherent errors. However, a prospective study would have taken several years in order to obtain sufficient patients, and the peak of age at onset of this particular manifestation of atopic dermatitis is striking in our present material. Some hundreds of our patients had not reached the age of 6 years, and it is possible that the peak would have been even more evident if we had followed them until they were older.

It has been theorized, particularly among laymen, that this localization might be due to allergic sensitivity to plastic materials in toilet seats. This theory has never been proved, and in fact allergic contact dermatitis is rare in atopics (1). On the other hand, it is certainly true that wool and some other clothing materials may produce pruritus when in contact with the skin, but this is not due to an