Gianotti-Crosti Syndrome in an Adult Patient Following a Recently Acquired Epstein-Barr Virus Infection

Sir,

Gianotti-Crosti syndrome (GCS) is a self-limiting papulovesicular acrodermatitis with underlying viral infection, up to now predominately diagnosed in children.

Patients with the clinical finding of GCS have been described to develop a distinctive self-limiting papular or papulovesicular skin eruption with a predominant localization of the acral regions such as cheeks, buttocks and extremities in association with underlying viral diseases (1, 2).

Originally, hepatitis B virus was reported to be associated with the elaboration of GCS, although its causative role could not be established in all patients (3). In recent reports a variety of viral infections have been reported to be linked to the finding of GCS, including Epstein-Barr virus, cytomegalovirus (CMV), enteroviruses, adenoviruses and human immunodeficiency virus (HIV) (3–9).

Following a study by Caputo and co-workers the term GCS is used for description of acral papular eruptions of childhood with underlying viral disease, regardless of further specification (9).

Occurrence of GCS in adult patients is a very rare finding, which has been described only occasionally in the medical literature and predominately in association with hepatitis B infection (10). Very recently elaboration of GCS after a preceding vaccination against influenza virus was reported, although association to a positive anti-hepatitis B titer could not be completely ruled out (11).

We here call attention to onset of GCS following a recently acquired Epstein-Barr virus infection in an adult patient who had an otherwise unremarkable medical history.

CASE REPORT

A 26-year-old Caucasian female patient presented at our hospital with acute exanthematic macular drug reaction to oral administration of amoxicillin, which had been prescribed for a 2-week history of persistent pharyngeal inflammation. Therapy with intravenous prednisolone rapidly improved the skin symptoms, and the patient was free of skin eruptions 4 days after admission.

At this point, viral titers positive for anti-EBV-IgM antibodies with slight elevation of anti-EBV-IgG were obtained, results indicative of recent EBV infection. Further immunological specification showed anti-EBV-CA IgG>1:40, anti-EBV-CA-IgM>1:12 (capsular antigen) and negative results for anti-EBV-EA-IgG and anti-EBV-NA (nuclear antigen). Titers for hepatitis A,B,C as well as anti-HIV 1/2 and a battery of other viruses were negative.

Two days later the patient presented again with new skin lesions differing from the previous ones in terms of morphology and localization. Succulent, inflammatory, non-itching papular to partly papulovesicular-appearing lesions, approximately 3–5 mm in diameter, were now seen, located predominantly at the acral regions. The eruptions were symmetrically distributed on the neck, upper and lower limbs as well as on the buttocks (Fig. 1). Lesions were not painful. Involvement of mucous membranes was not seen. Koebner's phenomenon was absent. Ultrasound examination of spleen and liver showed no patho-



Fig. 1. Numerous non-confluent, monomorphic 3- to 5-mm erythematous papular to partly papulo-vesicular-appearing lesions on the dorsum of both hands (right), the neck and the distal leg.

logical findings. No concomitant lymphadenopathy was noted, with the exception of a single palpable node of the left mandibular region.

The eruptions cleared spontaneously approximately 14 days after onset without hypopigmentation. No recurrence has been noted for the last 6 months.

Distribution of the skin lesions, with an acrolocalized predominance, and the typical monomorphological appearance strongly correlated to eruptions found in the classical form of GCS in children. Erythema multiforme was ruled out clinically by the absence of target lesions, sparing of mucous membranes and lack of subjective symptoms. Other viral exanthemas like ECHO-virus exanthema were excluded serologically.

DISCUSSION

Until recently GCS was divided into papular acrodermatitis of childhood, described by Gianotti (2), a disease associated with HBsAg and papulo-vesicular acrorelated syndrome in cases with associated viral infections other than hepatitis B (2. 3). By analyzing more than 300 cases retrospectively it could be demonstrated that clinical differences are most likely due to individual characteristics rather than the causative virus and that the supposed distinction of these two forms is not possible (9). Consequently, the term GCS was proposed for the clinical finding of papulo-vesicular acrodermatitis with underlying viral infection regardless of specification (9). GCS in adult patients is a very rare occurrence, described only occasionally and almost always in association with hepatitis B (10, 11). Elaboration of GCS following an Epstein-Barr virus infection, which is not uncommon in children, has not been reported so far in adult patients. As infection with the EBV usually takes place in childhood, adult patients may be challenged with virus associated-diseases to a lesser extent and may therefore usually not be confronted with this particular skin eruption. On the other hand, the course of EBV infection in children usually results in less severe illness than in adult patients, representing a special reaction pattern of the juvenile body to this viral disease which in some patients is followed by elaboration of GCS.

As histopathological findings usually do not give specific results (3, 9), the diagnosis of GCS is mainly based upon clinical findings, which should draw attention to GCS in adult patients following virus infections, a diagnosis which may be underestimated in these patients.

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