

Sweet's Syndrome After BCG Vaccination

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Sir,

Sweet's syndrome (SS) is an erythematous skin eruption with fever, neutrophilia and neutrophils infiltrating lesional skin. We report here a case of SS following BCG vaccination.

CASE REPORT

A 36-year-old woman was referred to our department with a 48-h history of acute febrile dermatosis with arthralgia. She was previously healthy and did not use any medication. Her physician had performed an intradermal BCG vaccination on her left arm 12 days earlier because she remained negative to intradermal tuberculin. Ten days later, she developed an erythematous, oedematous plaque with a mamillated surface on the injection site, rapidly involving the trunk, abdomen and limbs (Fig. 1). There was no mucous membrane involvement. The patient had fever (39°C) and intense diffuse arthralgia. On further clinical examination, no other abnormality was found. Laboratory blood tests showed neutrophils measuring $9.6 \times 10^9/l$, and an inflammatory syndrome (C-reactive protein, 336 mg/l; erythrocyte sedimentation rate, 43 mm/h). Liver and renal function tests were normal. Histopathological examination showed a diffuse dermal neutrophilic infiltrate with intense oedema typical of SS. Chest X-ray and abdominal ultrasonogram were normal. The patient was treated with prednisone, 40 mg daily, resulting in a dramatic improvement. Treatment was tapered off and stopped within 4 weeks without recurrence of the eruption. Tuberculin skin test was controlled as positive (8 mm) one month after the end of treatment.



Fig. 1. Skin eruption on trunk and arms.

DISCUSSION

Sweet's syndrome is frequently idiopathic (70% of cases), but has been associated with numerous diseases, including inflammatory diseases, haemoproliferative disorders, drugs or various infectious agents (1). The pathogenic mechanism is unclear, but SS is thought to be an abnormal immunological reaction to a variety of antigens. In our case, it is highly probable that the BCG was responsible for the disorder, because the skin eruption began at the injection site, started 10 days after vaccination and no other aetiology was found. Only a few cases of SS following vaccination have been described. One case occurred 4 days after a pneumococcal vaccination following splenectomy (2). Two cases are reported to have occurred 3 days after smallpox vaccinations (3). Only one case of SS occurring 15 days after a BCG has been described, but the authors did not control the tuberculin test (4). We conclude that SS should be suspected and a skin biopsy performed when an acute dermatosis appears some days after a BCG. According to our experience, a tuberculin skin test can be performed some time after the acute illness. If negative, another vaccination can be discussed if indispensable, particularly among health staff.

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