To the Editors:

A case of Kawasaki disease with reaction at a DPT vaccination scar site

We describe this case since it is the first report of Kawasaki disease (KD) with an unusual manifestation of induration and erythematous reaction at a DPT scar site.

An 11-month old boy was admitted with fever for 3 days and a rash of 12 hours' duration. There was redness and swelling at scar sites of BCG (left deltoid) and DPT vaccinations (upper left lateral thigh), given at birth and at 6 months.

He was febrile (102°F), irritable and ill, with a pleomorphic pruritic rash over the trunk and limbs and bilateral non-purulent conjunctivitis. He had red cracked lips and a strawberry tongue. Discrete cervical lymphadenopathy was present. ENT examination was normal. BCG and DPT scar sites were erythematous and indurated but not tender. Systemic examination was normal. The erythrocyte sedimentation rate (ESR) was 47 mm (1st hour), full blood count (FBC) was 5.0 x 10⁹/L, (neutrophils 78%, lymphocytes 8.7%, monocytes 6.7%, eosinophils 4.9%). Platelet count was 328 000/mm². Blood, urine and throat swab cultures were taken.

Since septicemia could not be excluded, intravenous ceftriaxone was started. Over the next 48 hours the child remained ill, needing intravenous fluids to maintain hydration. Induration over the scar sites subsided within 24 hours, while the rash disappeared in 48 hours.

Blood counts done on two successive days and a blood picture remained normal.

Fever subsided on the 7th day. On day 8, all culture reports were sterile and the child was discharged after omitting antibiotics. On day 14, the child was clinically well, but there was peeling of skin over the hands and soles. A blood cell count showed a total count of 5600, (neutrophils 65%) and a platelet count of 461 000/mm³. The ESR was 23 mm (1st hour) and the blood picture showed thrombocytosis. A retrospective diagnosis of KD was made and the patient commenced on aspirin (2 mg/kg/day) and dipyridamole (5 mg/kg/day). An echocardiogram and abdominal ultrasound were normal. Intravenous immunoglobulin was not given due to the relatively late stage of diagnosis.

After 6 weeks, he remained clinically normal. The ESR was 4 mm (1st hour) and the platelet count was 273 000/mm³. Drugs were omitted. A repeat echocardiogram at 6 weeks and 6 months were normal.

KD has previously been associated with erythema and induration at the BCG injection site, reported commonly in Japan and rarely in the USA (1,2,3). There are no other published reports previously of reactions at other vaccination sites.

References

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