

## LETTER TO THE EDITOR

## Gianotti-Crosti Syndrome Following Novel Influenza A (H1N1) Vaccination

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Dear Editor:

Gianotti-Crosti syndrome (GCS) is a self-limited, papulovesicular exanthem with a symmetrical distribution on the hands, feet and faces of children between 2 and 6 years. GCS is usually associated with viral infections or immunization, but the pathogenesis remains controversial<sup>1</sup>.

A 7-year-old boy presented with a 2-day history of asymptomatic symmetrical monomorphic papules of the face and extensor surfaces of the extremities (Fig. 1). The lesions had appeared 5 days after a single 15- $\mu$ g dose of a novel influenza A (H1N1) vaccine (Greenflu-S<sup>®</sup>, Korean Green Cross Corporation, Seoul, Korea). The patient was otherwise healthy. Routine laboratory tests were within normal ranges and serological tests for cytomegalovirus, Epstein-Barr virus, hepatitis A, hepatitis B, enterovirus pool, parovirus B19, and *Mycoplasma pneumoniae* were negative. Screening for the novel influenza A virus was negative. Additionally, the result of polymerase chain reaction of nasopharyngeal secretion was negative for H1N1 virus. A skin-biopsy specimen showed intraepidermal spongiosis and perivascular lymphocytic infiltrations in the upper dermis (Fig. 2). The eruption sponta-

neously resolved after 3 weeks. In the present case, clinical and histopathological features were consistent with GCS.

The association between immunization and GCS has already been reported with hepatitis A, hepatitis B, Japanese B encephalitis, poliomyelitis, measles, rubella and mumps vaccination<sup>1-5</sup>. Cambiaghi et al.<sup>6</sup> also reported a case of GCS in an adult after influenza virus vaccination. The exact mechanism of GCS is still unclear, although a number of hypotheses have been proposed including a virus-induced type IV cutaneous hypersensitivity, genetic factors or immunologic imbalance<sup>1</sup>.

Although the limited safety data of the pandemic H1N1 virus vaccine generated, Plennevaux et al.<sup>7</sup> reported no new vaccine-related serious adverse reactions only for injection-site reactions (erythema, swelling, induration or ecchymosis) and systemic reactions (headache, myalgia and malaise) up to about 50%, with no noticeable cutaneous reactions. To our knowledge, this is the first reported case of GCS following H1N1 vaccination.

Since immunization against influenza only rarely causes GCS, development of GCS is not a contraindication to completing the full course of injections. However, clinicians should be aware that GCS could be a possible adverse reaction associated with the novel vaccine against the virus strain A/California/07/2009 H1N1.

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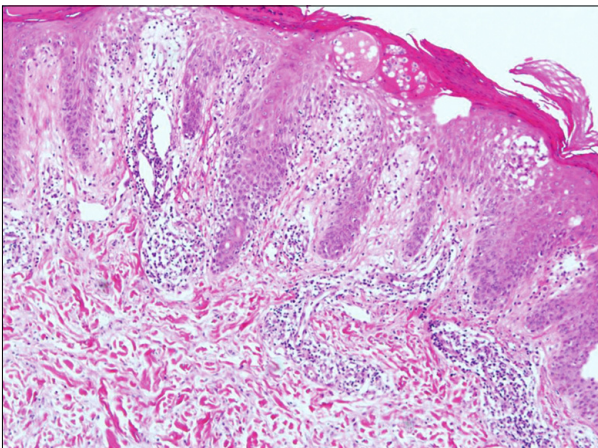
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**Fig. 1.** Papular eruption on both elbows.



**Fig. 2.** Epidermis shows spongiosis with hyperkeratosis and parakeratosis. Mixed perivascular infiltrate is present in the dermis (H&E,  $\times 100$ ).

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