LETTER TO THE EDITOR

Adverse events after flu vaccination in patients with immune disorders

To the Editor—May I report two recent cases of adverse events after flu vaccination experienced by patients with known immune disorders?

In one case, an 89-year-old Chinese Indonesian male with eczema and allergic rhinitis was injected with the seasonal flu vaccine (not the H1N1 influenza vaccine) and a pneumococcus vaccine on 14 November 2009. His eczema was in remission at the time of injection. One week later he developed a skin rash that became progressively more severe, involving both upper limbs (Fig 1), both knees, and his right ankle. His trunk was also itchy but he had no rash. He had been taking a number of medicines—aspirin, simvastatin, lisinopril, atenolol, isorbide mononitrate, frusemide, natrilix SR, colchine, voltaren—for several years, and reported no side-effects. When his rash was most pronounced there were two significant laboratory findings. His eosinophil count rose from 3.8% in a previous test to 18.7% and his immunoglobulin E was 3435.1 ng/mL (reference level, 0.2-379.2 ng/mL). He improved with topical steroids, oral anti-histamines, and suspension of his other medications for a week.

FIG 1. Skin rash on the right arm after flu vaccine

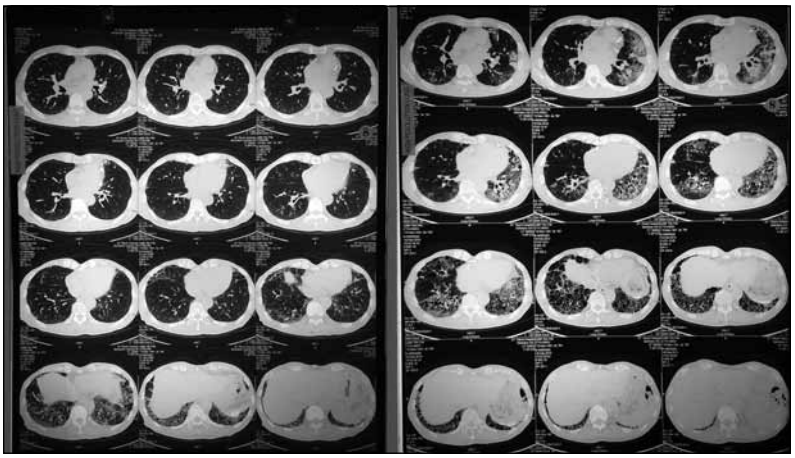

FIG 2. Computed tomographic thorax before (left) and after (right) flu vaccine

The second case involved a Chinese male, aged 78 years, who had a long history of coronary heart disease, pulmonary tuberculosis, pulmonary fibrosis and benign prostatic hypertrophy managed in Hospital Authority (HA) institutions. He was given the H1N1 flu vaccine on 6 January 2010 (but no seasonal flu/pneumococcus vaccine). About 3 weeks later he developed some flu-like symptoms, including a runny nose, and increased shortness of breath. His chest X-ray showed a marked increase in his pulmonary shadows. An exacerbation of his pulmonary fibrosis and additional bronchiolitis obliterans organising pneumonitis shadows were confirmed by computed tomographic scanning of his thorax (Fig 2). He was referred back to the HA institution for further management.

Vaccination works by augmenting the immune system's response to a specific antigen, but overall immune activity may be over-stimulated in some cases. The medical literature is full of claims and counter claims about the risks of autoimmune disease following vaccination.[1] While the two cases reported here do not constitute irrefutable evidence of vaccine-related exacerbations of immune disorders, such adverse events should be noted for future reference. It is worth noting that the Swiss medical regulator has just recommended that patients with serious autoimmune diseases should not use an H1N1 flu vaccine.[2]

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