Cutaneous Vasculitis Following Influenza Vaccination

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A 17-year-old woman who had been well in the past developed painful erythematous eruptions three days after 2009 pandemic influenza A H1N1 vaccination. She had symmetric erythematous vesicular papules, located predominantly on her trunk, arms and thighs (Picture 1). She denied fever, malaise, myalgias and arthralgias. Serum chemistry, including renal and liver function and urinalysis were normal. An excisional biopsy specimen of skin showed leukoclastic vasculitis with subepidermal vesiculation. Mixed inflammatory cell infiltrate was composed of neutrophils, eosinophils and lymphocytes (Picture 2). Extravasation of red blood cells (Picture 3, arrowhead) and leukocytoclasis (Picture 3, arrow) were also noted. Cytoplasmatic antineutrophil cytoplasmatic antibody and perinuclear, antinuclear and anticardiolipin were negative. The lesions resolved completely without scarring in two weeks. There have been a few reports of vasculitis after influenza vaccination, including microscopic polyangiitis, leukocytoclastic vasculitis, Henoch-Schönlein purpura, giant cell arteritis and Wegener granulomatosis (1). Most such patients are elderly or have chronic illness. Although skin is the most frequently affected site, systemic involvement is common. Most of the patients respond well to steroid therapy (2).

References


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