Leukocytoclastic Vasculitis Associated with Macrolide Antibiotics

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Figure 1. Purpuric nonblanching rash on the patient's foot and leg.

Figure 2. Neutrophilic vasculitis of small vessels accompanied by fibrinoid necrosis and leukocytoclasia (Hematoxylin and Eosin staining, ×400).

A 51-year-old woman was admitted to the hospital for antibiotic treatment of nontuberculous mycobacterial lung disease due to *Mycobacterium abscessus*. Combination antibiotic therapy, which included cefoxitin, amikacin, clarithromycin, and ciprofloxacin, was started. She had no history of allergic reactions to any drugs. Three days later, she developed a purpuric, nonblanching rash, which was palpable in sections, on both of her arms and lower legs (Fig. 1). Her platelet count and coagulation factors were normal. After the discontinuation of all antibiotics and application of topical corticosteroid therapy, the skin lesions disappeared within 6 days. A skin biopsy revealed neutrophilic vasculitis of small vessels accompanied by fibrinoid necrosis and leukocytoclasia (Fig. 2). Clarithromycin was readministered first. The purpuric ecchymotic lesions reappeared on her feet on the third day of therapy. Clarithromycin was discontinued, and the skin lesions began to fade. Three days later, azithromy-

cin was administered. On the third day of azithromycin therapy, she developed a widespread purpuric rash on her arms, legs, and feet again. The skin lesions resolved after azithromycin discontinuation. Of the drugs associated with leukocytoclastic vasculitis, antibiotics are the most common agents (1). However, only a few cases of leukocytoclastic vasculitis induced by clarithromycin or azithromycin have been reported (2-4). The present case showed that both clarithromycin and azithromycin, which are the most important oral antibiotics for the long-term treatment of nontuberculous mycobacterial lung disease, may lead to leukocytoclastic vasculitis.

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