Rheumatoid Vasculitis–Associated Foot Gangrene

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Rheumatoid vasculitis (RV) is one of the most serious complications of rheumatoid arthritis (RA). Venables et al found that circulating immune complexes may be involved in the pathogenesis of RV.1 Rituximab (RTX) was proved to be effective in patients with RV.2

A 41-year-old female with a 5-year history of erosive seropositive RA received methotrexate (7.5 mg/week) and hydroxychloroquine (0.2 g/day) in the last 5 years. Numbness and pain in lower extremities had persisted for 7 months, followed by the bruised appearance of toes that progressed to foot gangrene (Figure 1A). The patient had no history of diabetes or atherosclerosis. Electromyography revealed sensorimotor peripheral neuropathy in lower limbs, with mixed axonal and demyelination features. Antineutrophilic cytoplasmic antibody was negative. Cryoglobulins and complement C3 were normal. Computed tomography angiography of lower extremities showed no signs of macrovascular disease. The erythrocyte sedimentation rate was elevated to 37 mm/h and titers of rheumatoid factor and anticyclic citrullinated peptide antibodies were 105 U/mL and 375 U/mL, respectively. At initial presentation, the patient received high-dose methylprednisolone (1 mg/kg/day) and gradually tapered to 0.5 mg/kg/day. Treatment with intravenous cyclophosphamide at a dose of 0.6 g every 2 weeks lasted for 6 months. Articular symptoms improved, but the foot gangrene persisted. Therefore, the patient received 4 infusions of 100-mg RTX at 1-week intervals for 4 weeks, for a total dose of 400 mg. Fortunately, the foot gangrene was effectively controlled, and the numbness and pain in lower extremities were alleviated by week 12 (Figure 1B). During the subsequent year, the gangrenous toe detached completely.

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REFERENCES