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## Bacterial Infection in the Limbs of Patients with Rheumatoid Arthritis during Biological Agent Therapy

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### ABSTRACT

Biological therapies in rheumatoid arthritis (RA) are known to increase the risk of serious infections. The present study was performed to evaluate the clinical features of bacterial infections occurring in the limbs during biological therapies in patients with RA. By March 2011, 11 RA patients (14 limbs) treated with biological agents at our institution required hospitalization due to bacterial infections occurring in the limbs. These patients had an average age of 53.7 years old. Infections occurred an average of 19 months after biological treatment. Two limbs in one patient were treated with infliximab, eight limbs in six patients were treated with etanercept, one limb in one patient was treated with adalimumab, and three limbs in three patients were treated with tocilizumab. Cellulitis occurred in 7 limbs, late infections after total knee arthroplasty occurred in two limbs, early infections after orthopedic surgery occurred in three limbs, and septic arthritis occurred in two limbs. Four cases had comorbidities—liver cirrhosis and diabetes mellitus in one and three cases, respectively. All patients were treated using corticosteroid with an average dose of 4.6 mg daily. Seven limbs required surgical treatment. All patients finally recovered. Ten limbs continued treatment with biological agents. Care must be taken regarding bacterial infection in the limbs of RA patients treated by using biological agents, particularly those with comorbidities. Further studies are required to confirm means of preventing such infections in daily practice.

### KEYWORDS

Bacterial Infection; Limbs; Rheumatoid Arthritis; Biological Agents

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