

Complicated Monkeypox Infection in a Patient With Multiple Sclerosis and Fingolimod Treatment

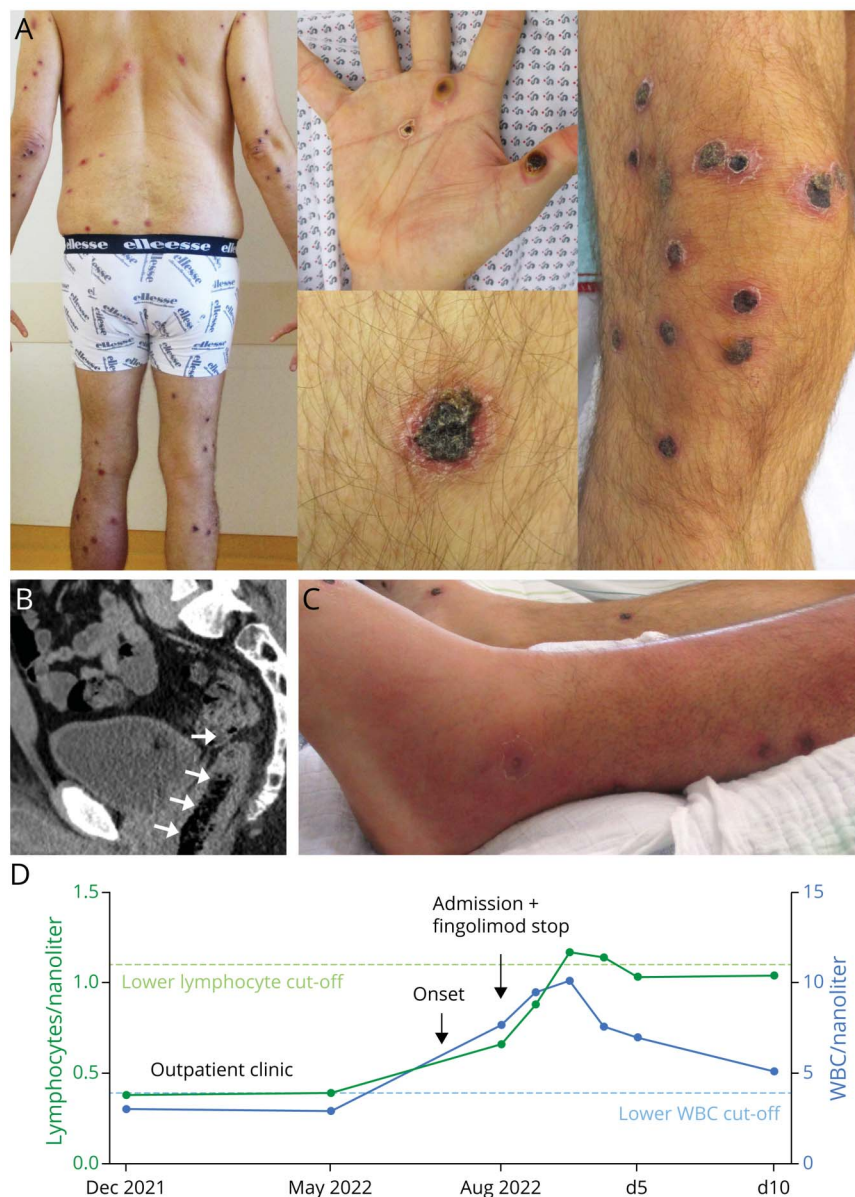
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Figure Clinical Presentation and Laboratory Results of a MS Patient With Monkeypox



(A) Monkeypox rash with approximately 180 skin lesions. (B) Abdominal CT reveals proctitis with perirectal fat stranding (arrows). (C) Bacterial superinfection manifested as lower leg phlegmon. (D) The patient presented preinfection lymphopenia and leucopenia. After symptom onset and fingolimod discontinuation, white blood cells (WBC) increased rapidly. d = day of hospitalization.

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A 46-year old man with controlled relapsing-remitting multiple sclerosis (MS) and long-term fingolimod treatment developed multiple painful skin lesions (Figure, A). Outpatient skin swab revealed monkeypox virus infection. No fever was detected, but the disease course was complicated by prolonged cutaneous, oral and perianal manifestations, proctitis (Figure, B), gastrointestinal bleeding with the need for blood transfusions, lower leg phlegmon (Figure, C), lymphadenopathy, and hyperbilirubinemia. Furthermore, the patient presented acute urinary retention and hematuria.

At admission, moderate lymphopenia (Figure, D) was detected and fingolimod was stopped. Six days after discontinuation, flow cytometry still revealed severe T-cell lymphopenia (0.67/nL, CD4⁺ 0.24/nL). Nevertheless, the patient improved with supportive treatment and was released 35 days after symptom onset.

Fingolimod-induced lymphopenia is a risk factor for severe monkeypox infection. As monkeypox was recently declared a Public Health Emergency of International Concern, vaccination should be evaluated in patients with MS before immunosuppressive treatment, particularly in patients receiving sphingosine-1-phosphate receptor modulators.^{1,2}

Author Contributions

L. Müller-Jensen: Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; analysis or interpretation of data; H. Kriedemann: Drafting/revision of the manuscript for content, including medical writing for content;

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