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

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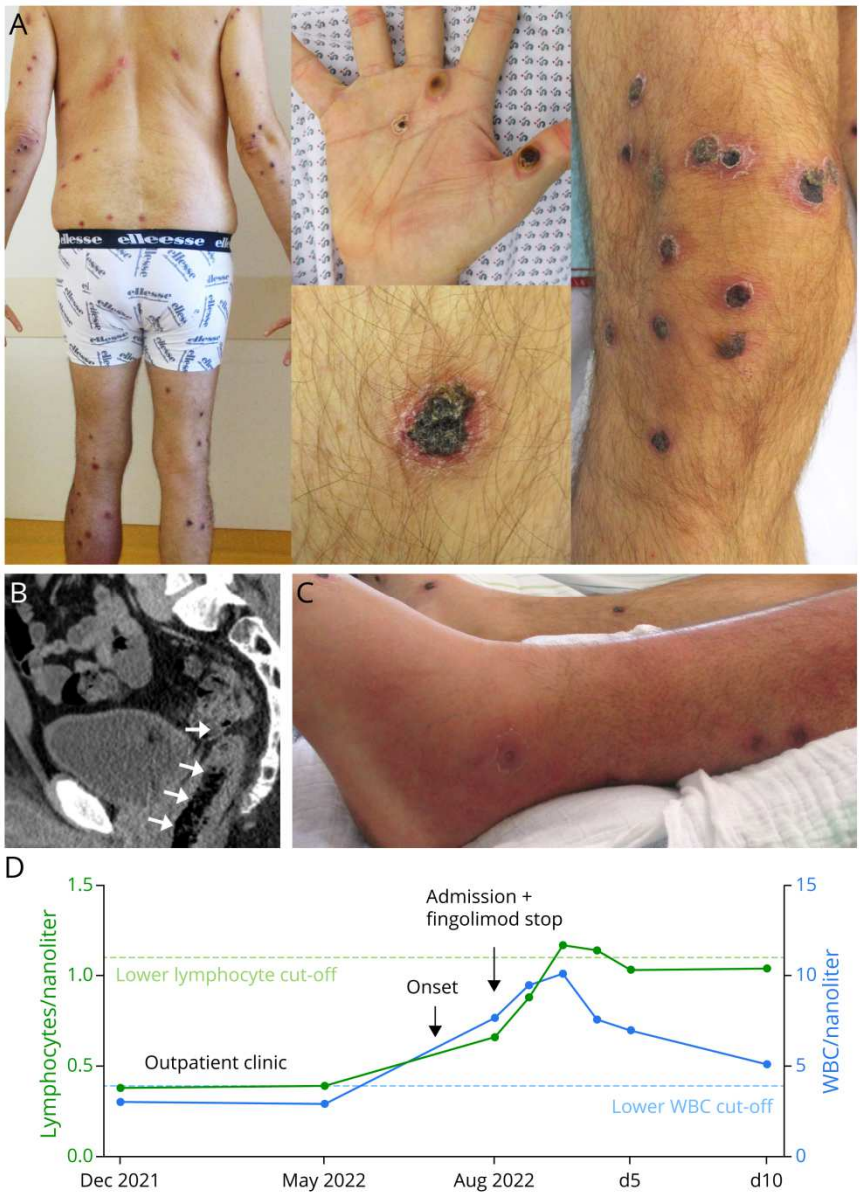
A 46-year old man with controlled relapsing-remitting multiple sclerosis (MS) and long-term fingolimod treatment developed multiple painful skin lesions (Figure 1A). Outpatient skin swab revealed monkeypox virus infection. No fever was detected, but the disease course was complicated by prolonged cutaneous, oral and perianal manifestations, proctitis (Figure 1B), gastrointestinal bleeding with the need for blood transfusions, lower leg phlegmon (Figure 1C), lymphadenopathy and hyperbilirubinemia. Further, the patient presented acute urinary retention and hematuria.

At admission, moderate lymphopenia (Figure 1D) 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 MS patients before immunosuppressive treatment, in particular in patients receiving sphingosine-1-phosphate receptor modulators.[1,2]

Figure 1. 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) Patient showed pre-infection lymphopenia and leucopenia. After symptom onset and fingolimod discontinuation, white blood cells (WBC) increased rapidly. d = day of hospitalization.



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