

Rituximab-induced severe acute thrombocytopenia in a patient with splenic marginal zone lymphoma

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Abstract

Introduction: Rituximab, which is widely used in the treatment of B-cell lymphoma, is a chimeric monoclonal antibody directed against the CD20 antigen. Rituximab has many side effects, mainly allergic and neurological. Rituximab may cause thrombocytopenia in the long term after administration. Rare cases with rituximab-induced acute thrombocytopenia have been reported in the literature. **Case Report:** A 51-year-old female patient who newly diagnosed splenic marginal zone lymphoma received rituximab as first line therapy. Petechiae occurred in the lower extremities on the day following rituximab administration. The blood test showed a severe drop in the platelet count from 112,000/ μ L to 5,000/ μ L. Blood peripheral smear evaluation confirmed severe thrombocytopenia. **Management and outcome:** There was no change in hemoglobin or white blood cell levels. After the diagnosis of rituximab-induced acute thrombocytopenia, thrombocyte suspension was administered due to the risk of bleeding. Close clinical and laboratory observations were made. The platelet count began to rise gradually in the following period. Before the second week of rituximab administration, the platelet count was 122,000/ μ L. No complications developed after premedication and slow rituximab administration, and subsequent treatments were continued in the same way. **Discussion:** Rituximab has a widespread use, especially in malignancies and autoimmune diseases. Like many monoclonal antibodies, rituximab has several side effects. Thrombocytopenia is a long-term side effect associated with rituximab, and rituximab-induced severe acute thrombocytopenia has been rarely reported. Therefore, it should be kept in mind that severe acute thrombocytopenia may develop after rituximab administration.

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