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An unusual course of rituximab

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Description

Rituximab (RTX) is increasingly used to manage autoimmune diseases and haematological malignancies [1,2]. Contrary to the common adverse effect of hypersensitivity reactions and infection, late-onset complications of rituximab are rarely reported.

We report the case of a 36-year-old woman diagnosed with Mixed Connective Tissue Disease (MCTD) who complained of severe left-sided upper abdominal pain during a second dose of rituximab infusion. She reported a similar pain episode, albeit less extreme, during the first rituximab infusion a fortnight ago.

She was blue-lighted to the emergency department, where global rebound tenderness and guarding of the left upper quadrant were observed. The differentials included splenic infarction due to RTX-induced thrombosis, infection, and splenic rupture. However, abdominal CT was normal despite high inflammatory markers and neutropenia. No pathogen was identified over scans or culture. The patient improved with empiric treatment, and further doses of RTX were deferred. A repeat CT scan 12 months later showed multiple punctate calcifications studding the spleen (Figure 1), suggesting the possibility of microthrombosis/microinfarcts.

In a patient with MCTD, vasculopathy on a background of inflammation may predispose to thrombosis. RTX binds to CD20-positive B cells and plasma cells and may cause the release of antibodies and cytokines [2]. Post-RTX reactions and thrombosis have been anecdotally reported, and clinicians should be aware of it and discuss this possibility with patients having underlying vasculopathy and active inflammation such as MCTD [3].

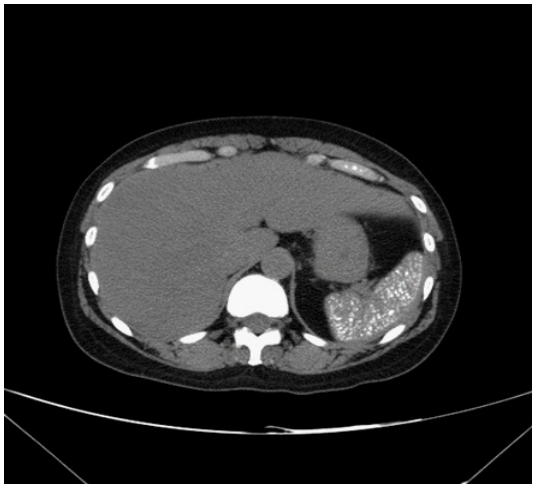

Figure 1: Shows multiple punctate calcific lesions within the spleen.

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Ethics and consent: This report adheres to Helsinki Declaration.

Conflict of interest: None.

References

1. Pescovitz MD. Rituximab, an Anti-CD20 Monoclonal Antibody: History and Mechanism of Action. American Journal of Transplantation. 2006; 6: 859-66.

2. Cerny T, Borisch B, Introna M, Johnson P, Rose AL. Mechanism of action of rituximab. Anticancer Drugs. 2002; 13.

3. Tun NT, Mi K, Smith J. Unusual Course of Splenic Marginal Zone Lymphoma. World J Oncol. 2013; 4: 205-9.