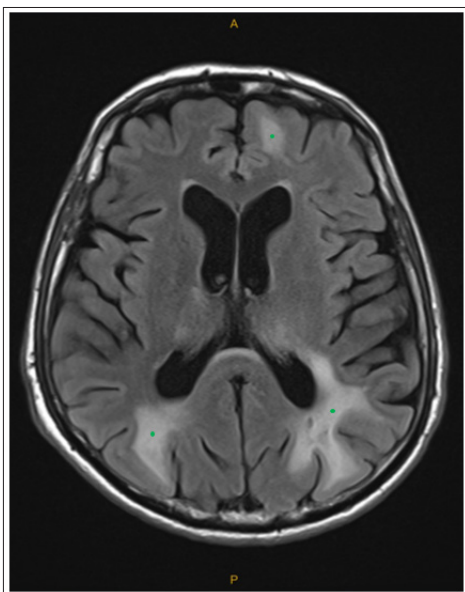


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Rituximab-Induced Progressive Multifocal Leukoencephalopathy

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Nil

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None

Consent

Informed consent from patient's next of kin

A 76 year-old high-functioning male presented with executive dysfunction nearing conclusion of rituximab maintenance monotherapy post bendamustine and rituximab induction for igm and igg bclonal lymphoplasmacytic lymphoma. In total seventeen doses of rituximab were delivered over approximately two years achieving partial disease response. This treatment occurred on a background of secondary immune thrombocytopenia necessitating low-dose corticosteroids for several years previously. Magnetic resonance neuroimaging demonstrated multifocal deep white matter lesions (green dots) confirmed as progressive multifocal leukoencephalopathy on both cerebrospinal fluid jc virus titres (33 iu/ml) and brain biopsy histopathology (intracellular viral inclusions concentrated within regions of demyelination). Despite eventual immune reconstitution in response to plasma exchange, ivig, filgrastim and pembrolizumab, our patient ultimately suffered progressive demyelinating foci associated with neurological disability culminating in death. As such, this case highlights a rare yet fatal side effect of rituximab immunotherapy.

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