

## Clinical Radiological Dissociation in SMART Syndrome : A Brief Case Report

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### Abstract

SMART (Stroke-like Migraine Attacks after Radiation Therapy) is a rare condition seen in patients with a history of brain radiotherapy. It presents with sudden unilateral neurological symptoms. MRI findings often show swelling, cortical T2 and FLAIR hyperintensities, and gyral enhancement, mainly in the temporal, parietal, and occipital regions. In our study, a 50-year-old male with a history of right temporal-parietal glioma, treated with chemoradiotherapy 28 years earlier and history of structural epilepsy, presented with headaches, temperature and GCS drop later he developed focal status epilepticus refractory to anti-seizure medication CSF was normal, including encephalitis antibodies, and the initial MRI showed no acute lesions. However, follow-up MRI revealed right-sided cortical changes and leptomeningeal enhancement. A diagnosis of SMART syndrome was proposed. Treatment with IVMP stopped the seizures. Despite clinical improvement, repeat interval MRIs kept showing small new enhancing lesions in the right cortex, which spontaneously resolved. In conclusion, SMART syndrome is an important differential diagnosis in a patient with focal neurological symptoms after radiotherapy. It is a presumed diagnosis, but being aware of it might avoid more invasive procedures like brain biopsy. Close radiological follow-up and MDT discussion ensure adequate management.

### Keywords

SMART syndrome, chemoradiotherapy, status epilepticus, leptomeningeal enhancement.

