Reversible Splenial Lesion Syndrome in Pediatric Systemic Lupus Erythematosus

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Transient lesions involving the splenium of the corpus callosum — reversible splenial lesion syndrome (RESLES) or mild encephalitis/encephalopathy with a reversible isolated splenium of the corpus callosum lesion (MERS) — have been described in patients with encephalopathy of various etiologies but rarely in systemic lupus erythematosus (SLE), limited to a case series of 3 patients[1,2,3].

A girl age 11.5 years diagnosed with SLE 15 months previously, with no history of central nervous system disease, receiving low-dose immunosuppression, presented with encephalopathy, pneumonia, septic shock, and acute renal failure. Neurological examination revealed upper and lower limb weakness and poor response to verbal commands. Glasgow Coma Scale was 8. A lumbar puncture revealed no cells but an elevated opening pressure. Electrolytes were normal. All cultures including viral polymerase chain reaction were negative. Echocardiogram was normal. Antiphospholipid and anticardiolipin antibodies were not detected. Urinalysis was suggestive of active glomerulonephritis.

Initial magnetic resonance imaging (MRI) examination showed abnormal T2 and fluid-attenuated inversion recovery (FLAIR) signal with restricted diffusion in the posterior aspect of the corpus callosum and no other diffusion-restricted lesions (Figure 1A). She was treated for septic shock, and her encephalopathy resolved after treatment with mannitol and high-dose corticosteroids within 24 hours. A followup MRI examination 2 weeks later was normal (Figure 1B).

RESLES/MERS is characterized by complete and rapid reversibility, within weeks to months[1,2]. It should be considered in patients with SLE who present with sudden onset of altered level of consciousness even in the absence of medications that have been associated with this syndrome.

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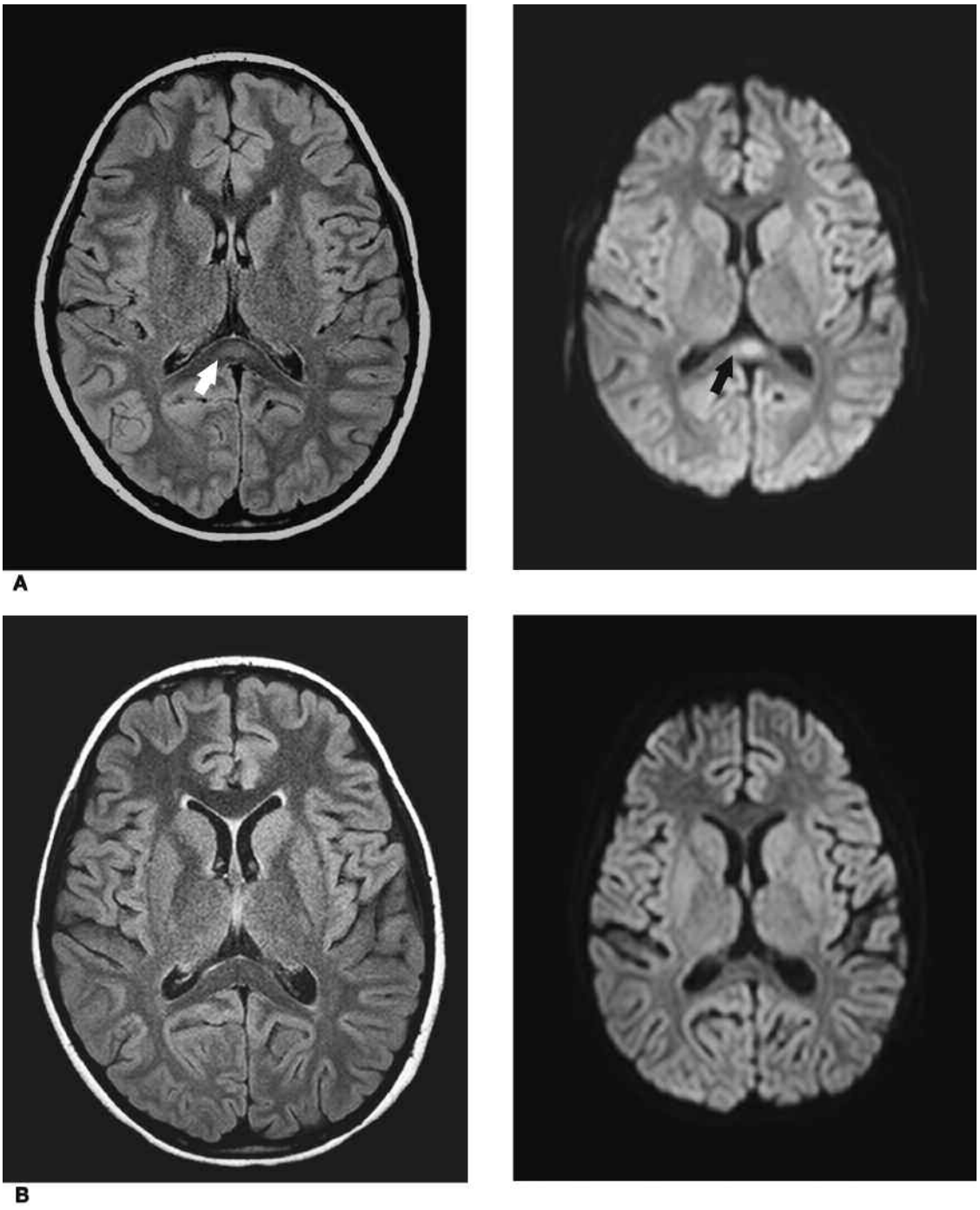

Figure 1. A. Initial magnetic resonance imaging (MRI) examination showed abnormal T2 and FLAIR signal with restricted diffusion in the posterior aspect of the corpus callosum and no other diffusion-restricted lesions. B. Followup MRI 2 weeks later was normal.