Onset of Cognitive Dysfunction in Systemic Lupus Erythematosus and Selective Involvement of the Choroid Plexus

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Cerebral abnormalities observed on magnetic resonance imaging (MRI) are common in patients with neuropsychiatric systemic lupus erythematosus (SLE)[1]. Increased volumes of both T1 and T2 weighted lesions and cerebral atrophy are often found in such patients. The MRI changes appear to be specifically related to the presence of neuropsychiatric manifestations[2]. We have recently seen a patient with stable SLE who presented with acute manifestations of cognitive dysfunction and isolated MRI changes on the choroid plexus. A 51-year-old man with stable SLE with a history of articular hematological and renal manifestations was inactive for the past 2 years receiving 2.0 g mycophenolate mofetil, 10 mg prednisone, and 200 mg chloroquine. His wife noted that in recent weeks he started to develop decline in the areas of attention and memory. There were no overt neurological manifestations; neuropsychological evaluation revealed impairments of logical reasoning and verbal and recent memory. On MRI the choroid plexus at the lateral, III, and IV ventricules showed a marked low signal on gradient-echo images that did not correspond to calcifications seen on corresponding computed tomographic images (Figure 1), possibly due to hemosiderin deposition. He was treated with pulse therapy, with reversal of the clinical picture in the following weeks.

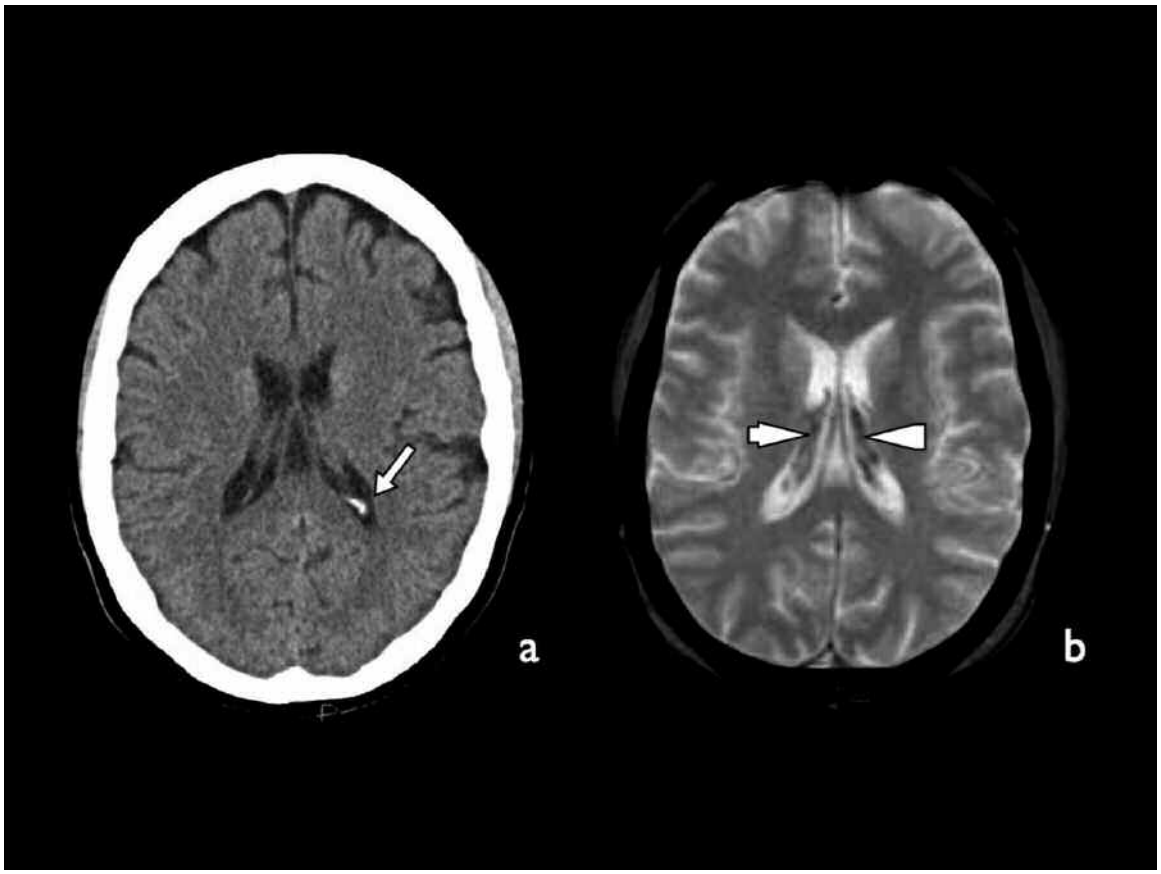

Figure 1. Axial nonenhanced CT image (a) and MRI T2* image (b) at the same level showing a marked low signal at the choroid plexus (b, arrowheads) not related to the calcifications — a normal finding — seen on CT image (a, arrow).

In SLE, isolated choroid plexus findings on MRI are extremely rare, and to our knowledge have been reported only once[3]. This novel finding should prompt proper investigation of other neurological manisfestations in patients with SLE.

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