

Possible iatrogenic bilateral cerebral ischemic infarcts in a woman with vasculitis

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Dear Editor,

Dihydroergotamine mesylate (DHE), an ergot alkaloid, is an effective therapy for migraine headache and is considered safe to be used for a broader range of headache types [1]. It is a significantly less potent arterioconstrictor than ergotamine tartrate (ET), which makes it a potentially safer drug [2]. However, it still has the potential to cause cerebrovascular events including cerebral hemorrhage, subarachnoid hemorrhage and ischemic strokes. These potential complications may be especially expected in certain clinical scenarios.

We report the case of a 23-year-old woman with a 4-week history of fluctuating and intractable headache that was initially diagnosed as migraine and treated with intramuscular DHE (1 mg/ml) twice over a period of 12 h. She also received two doses of sumatriptan succinate (70 mg) during the same period. She developed visual disturbance and left lower extremity weakness 2 h after the second DHE treatment. MRI of the brain showed bilateral ischemic infarcts (see Fig. 1). CT angiogram demonstrated diffuse vasospasm

of the cerebral vasculature predominantly in the posterior cerebral and anterior cerebral arteries. One day after the CT angiogram, she underwent a four-vessel conventional cerebral angiogram; this showed a beaded appearance of the cerebral vasculature consistent with vasculitis (see Fig. 2). These angiographic findings were still present in a repeat cerebral conventional angiogram 1 week after the initial one; however, a right frontal lobe brain biopsy was negative for any evidence of vasculitis.

The patient was also taking oral contraceptives at the time of presentation. The etiology of her infarctions may be multifactorial, but the combined administration of DHE and sumatriptan in the setting of vasculitis may have significantly contributed to the outcome. DHE and sumatriptan, though effective and safe treatment options for different headache syndromes, can result in serious complications (like cerebral infarction) if given over a short period of time. Moreover, the consideration of this treatment should be discouraged when the diagnosis of vasculitis is a possibility.

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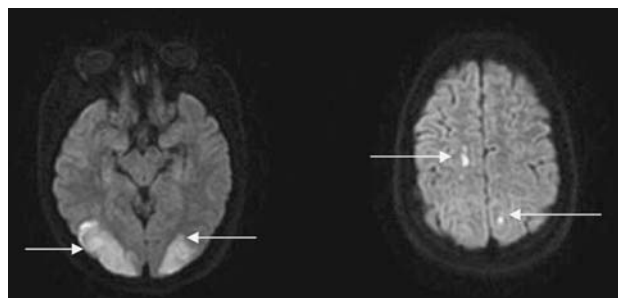


Fig. 1 Diffusion weighted images showing bilateral hemispheric infarcts

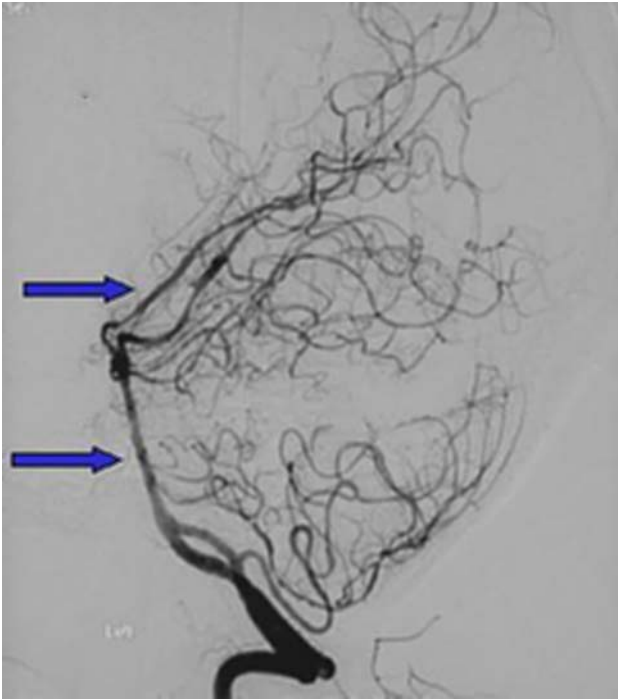


Fig. 2 Cerebral angiogram showing beading pattern of cerebral vessels consistent with vasculitis

Conflict of interest None.

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