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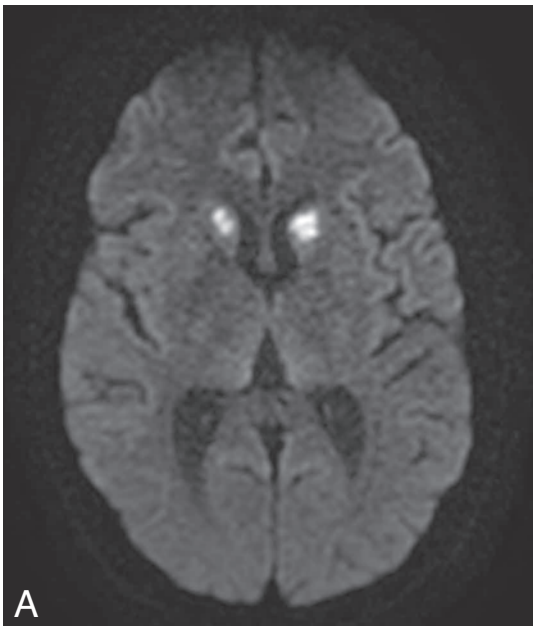
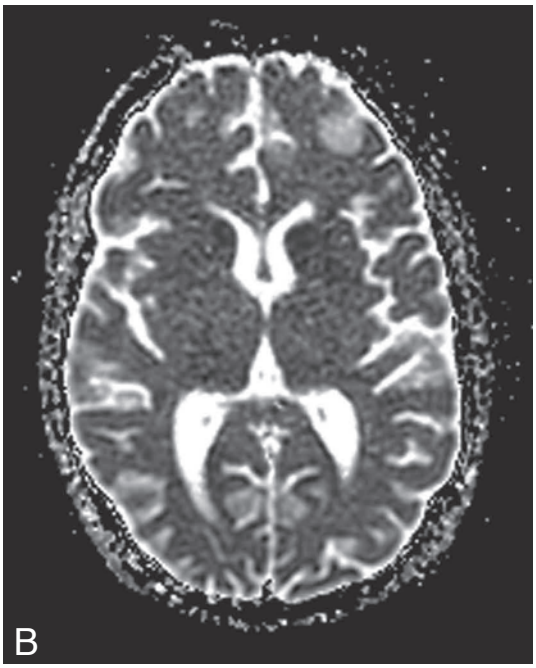
IMAGES IN CLINICAL RADIOLOGY





MR imaging features of acute bilateral caudate infarcts in pregnant woman

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A 20-year-old female, in her 20th week of pregnancy, was hospitalized due to recurrent, severe vomiting, dehydration, somnolence and bilateral upper limbs athetosis. Metabolic status revealed ketonuria, proteinuria and hypokalemia. After urgent laparoscopy due to acute abdomen, the patient became hemodynamically unstable, with respiratory insufficiency and mechanical ventilation was applied. After stabilizing mental and clinical status, extubation procedure was performed. Neurological examination revealed psychomotor slowing, apathy, hyperreflexia and right sided rigor. Magnetic resonance imaging (MRI) of the brain revealed symmetric infarcts in head of both caudate nuclei. High signal intensity lesion on axial diffusion weighted image (DWI, b-1000 (Fig. A) in the head of both caudate nuclei and low signal on apparent diffusion coefficient image (Fig. B), in keeping with acute infarcts. Management of the patient included correction of fluid and potassium deficit and secondary stroke prevention with aspirin.

Comment

Acute bilateral caudate nucleus infarcts are rare and MRI findings in pregnant patient have not been described yet. Small vessel disease is the predominant cause followed by cardioembolic and underlying carotid disease, but presumed cause in this pregnant patient was the systemic hypoperfusion due to hypovolemic shock. The most prominent clinical features of caudate vascular lesions are behavioral and cognitive abnormalities. Bilateral caudate infarcts were previously attributed to frontal behavioral syndrome, often associated with significant memory impairment. Caudate nuclei damage in our patient caused consequent bilateral athetosis and disruption of fronto-subcortical circuits, resulting in psychomotor slowing and apathy. Due to bilateral involvement of caudate nuclei, development of "strategic-infarct dementia" could be expected.

Reference

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