Mineralizing angiopathy presenting as basal ganglia stroke

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ICNC 2022
17th INTERNATIONAL CHILD NEUROLOGY CONGRESS
ANTALYA, TURKEY | OCTOBER 3-7, 2022

INTRODUCTION

Mineralizing angiopathy is an important cause of basal ganglia stroke especially in infancy. It was first described by Lingappa et al as a distinct clinicopathological syndrome. However there is paucity of knowledge of this disease entity which leads to unnecessary investigations.

CLINICAL PRESENTATION

A four month old child with normal perinatal and developmental history, presented to us with complaints of weakness of left upper and lower limb. There was history of fall from swing two days prior to onset of weakness but child remained normal for intervening 2 days. There was no history of loss of consciousness or seizures after fall. There were no previous similar episodes and family history was not significant. On examination, child was irritable. Fundus examination was normal. There was paucity of antigravity movement of left upper and lower limb. Intermittent hemidystonia was also observed.

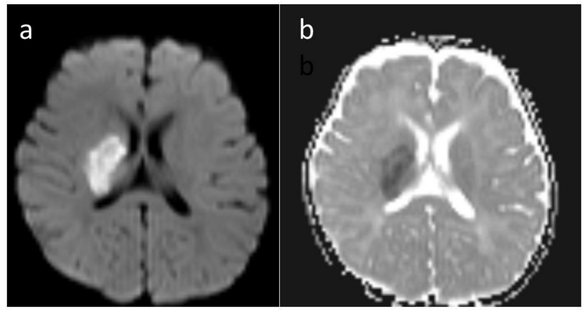
MANAGEMENT

MRI brain revealed right capsuloganglionic infarct while MRA was normal. CT of the brain revealed linear hyper density bilaterally suggestive of mineralization of leticulostriate arteries. Child was started on aspirin and physical rehabilitation. On 6 months of follow up child remained well with no reoccurrence. There was improvement in limb functions and normal developmental milestones.

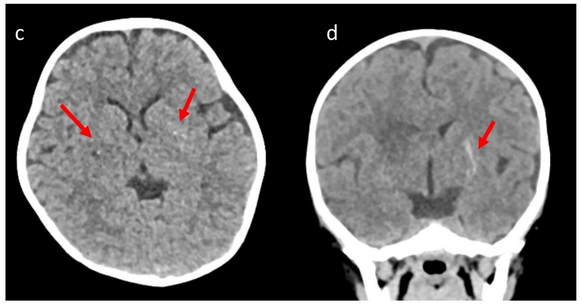
DISCUSSION

In the previous case series published, the authors concluded that detailed workup of these cases is not required as investigations for etiologies of stroke are noncontributory in most of the cases. Thin-sliced multiplanar reconstruction CT is the investigation of choice. The pathophysiology of this new disorder is not completely understood and requires further research.

IMAGES



(a) Diffusion weighted image showing restricted diffusion in right capsuloganglionic region (b) Corresponding hypodensity on Apparent diffusion coefficient



(c) Axial CT image showing bilateral lentiform nuclei calcifications (d) Coronal image showing mineralization of lenticulostriate artery

CONCULSION

Mineralising angiopathy is an important cause for stroke in children after trivial trauma. It should be considered as an important etiology while working up for basal ganglion stroke. Investigations for etiologies of stroke are noncontributory in these cases while CT scan is investigation of choice to pick up calcification in lenticulostriate vessels. The long term outcome is good in most of the cases however reoccurrences are also seen.

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