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Letter to the Editor

Mineralising angiopathy of lenticulostriate vessels without weakness in early infancy

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Dear Editor.

Mineralising angiopathy of lenticulostriate arteries presenting as infantile basal ganglia stroke after minor trauma is a distinct clinico-pathological entity.^[1] Affected children present with hemiparesis, while we report a rare case presenting without weakness. Four-month-old male child with normal birth history and development presented with paroxysmal events since the past 5 days in the form of posturing of left upper limb and deviation of angle of mouth to the left lasting for <10 s, not followed by post episode dullness or drowsiness, 10-12 episodes and then spontaneous resolution. There was no history of weakness of limbs, falls, trauma or fever. On examination, the anterior fontanelle was 1.5×1.5 cm, at level, weight of 5.4 kg (0 to -2 Z score) and head circumference of 39.5 cm (-2 to -3 Z score). The baby was active and alert, interested in surroundings, mild facial weakness on the left, power of more than 3/5 with mild asymmetry on left side with dystonia. Investigation, complete haemogram, electrolytes, glucose, liver and renal functions were normal. Computed tomography brain [Figure 1a and b] revealed bilateral calcification in basal ganglia and hypodense lesion in right basal ganglia with negative TORCH serology, normal cerebrospinal fluid analysis and electroencephalogram. Magnetic resonance imaging brain showed right basal ganglia infarct with diffusion restriction. The child was discharged on aspirin 5 mg/kg/day and iron supplementation.

In children with mineralising angiopathy of lenticulostriate vessels, hemiparesis is a well-known neurological finding, almost 100% as described by Gowda et al., Lingappa et al., Baby et al. and

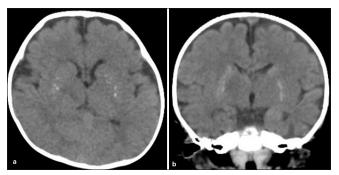


Figure 1: (a and b) Show axial and coronal views of a computed tomography scan of the brain, which shows bilateral curvilinear calcification with hypodensity in the right basal ganglia.

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Yang et al., in their respective studies, while in our case, there was no hemiparesis except for mild asymmetry. [1-4]

To conclude, mineralising angiopathy of lenticulostriate vessels should be considered in the differential diagnosis of extrapyramidal signs without weakness and history of trauma as early as 4 months of age.

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REFERENCES

- Gowda VK, Manjeri V, Srinivasan VM, Sajjan SV, Benakappa A. Mineralizing angiopathy with basal ganglia stroke after minor trauma: Case series including two familial cases. J Pediatr Neurosci 2018;13:448-54.
- Lingappa L, Varma RD, Siddaiahgari S, Konanki R. Mineralizing angiopathy with infantile basal ganglia stroke after minor trauma. Dev Med Child Neurol 2014;56:78-84.
- Baby N, Vinayan KP, Roy AG. Mineralizing angiopathy of lenticulostriate arteries with infantile basal ganglia infarct following minor head trauma: A case series. Ann Indian Acad Neurol 2019;22:316-9.
- Yang FH, Wang H, Zhang JM, Liang HY. Clinical features and risk factors of cerebral infarction after mild head trauma under 18 months of age. Pediatr Neurol 2013;48:220-6.

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