



Pediatric Ischemic Stroke with Hypertensive Emergency: A Case Report

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BACKGROUND AND SIGNIFICANCE

Pediatric ischemic stroke is relatively rare disease, but can lead to significant mortality, morbidity and long-term outcome. Understanding that children with strokes present differently than adults and often present with unique risk factors, will optimize outcomes in children. This case report aims to report ischemic stroke management with hypertension as risk factor in pediatric patient.

DISCUSSION

Pediatric stroke is a rare case and often under diagnosis, especially those concerning bilateral hemispheres. At first, this case was only diagnosed as emergency hypertension. Patient was consulted to the neurology department a week after acute onset. Because of the delay in diagnosing stroke, renal disease as an underlying disease stroke was also too late to be known. That all caused the management in this patient were delayed.

CASE

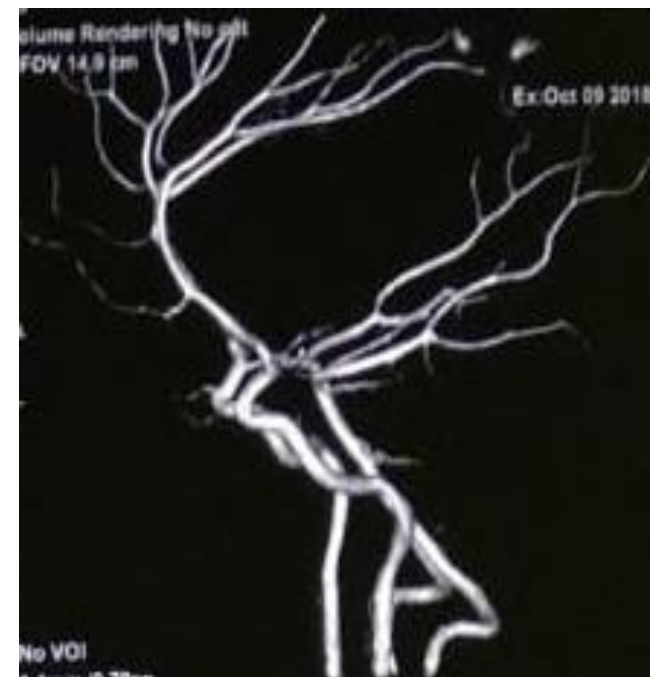
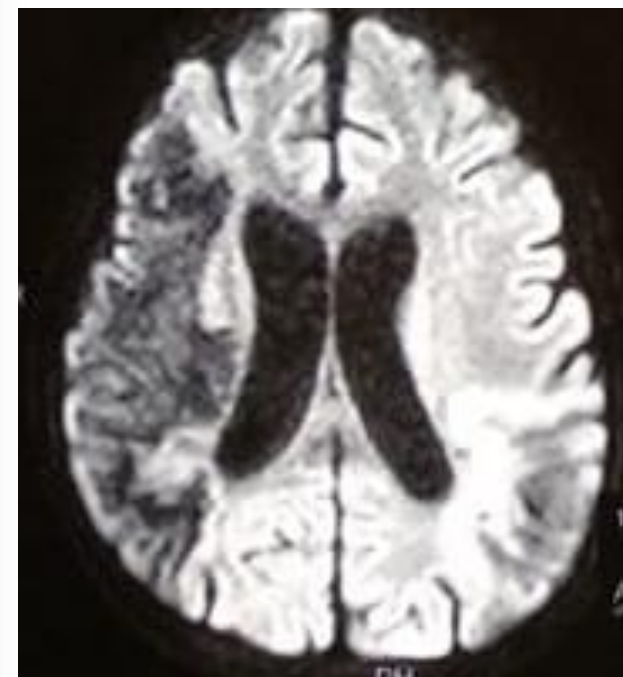
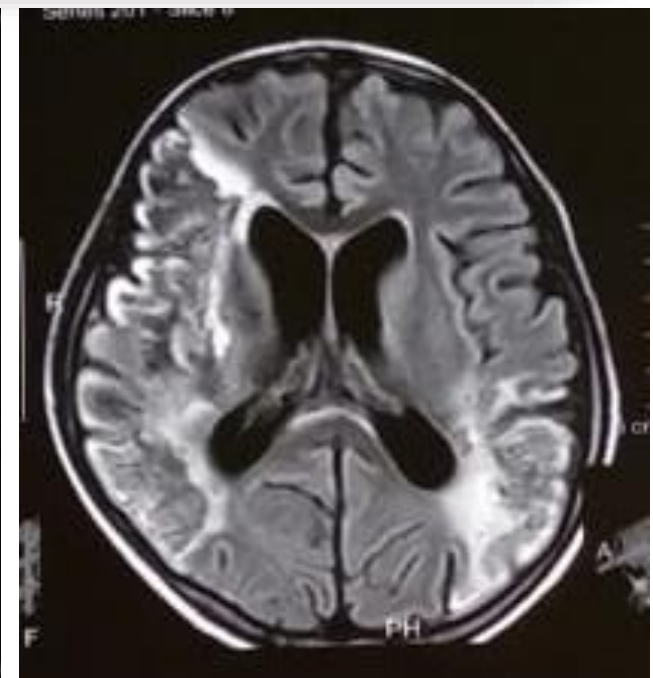
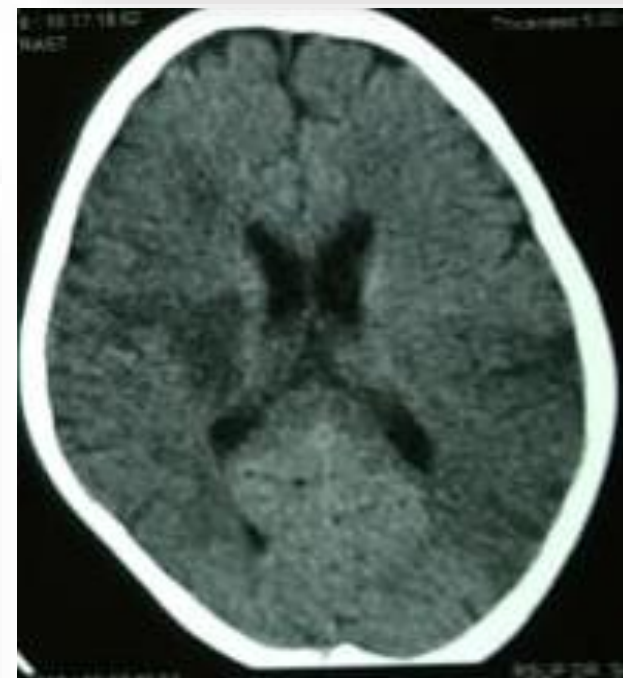
A 11 y.o. ♂ with a chief complaint of acute headache, followed by projectile vomiting, general tonic clonic seizure without aura, and decrease of consciousness.

- **PE:** GCS=5 (E1M3V1), blood pressure 240/140 mmHg, body temperature 40°C, bihemiparesis, tonus ↑, Babinsky's sign (+/+), NIHSS=29.
- **Laboratory:** leukocytosis, BUN creatinin ↑
- **Head CT-scan, MRI and MRA:** bihemispheric ischemic according to bilateral medial cerebral artery (MCA) vascularization.
- **DSA:** total stenotic in right a. cerebri media pars proximal M1, severe stenotic in left a. cerebri media pars media M2
- **Renal USG :** bilateral chronic parenchymal renal disease.

Therapy:

- Clopidogrel 75mg/24 hours
- Antihypertensive: Nicardipine titration with the target of decreasing MAP not more than 15%, Amlodipin 10mg/24 hours, Propranolol 40mg/8hours, furosemide 20mg/8 hours, and lisinopril 12,5mg/24hours
- Phenytoin 120mg/12hours
- Early rehabilitation

After 2 months of treatment, patient was discharged in a stable condition with bihemiparesis, global aphasia, myoclonic seizure, and his NIHSS was 17.



CONCLUSION

This case highlights pediatric ischemic stroke as a rare case in children and often under diagnosis. Renal disease as a cause of stroke children must immediately get optimal care. The outcomes after stroke at renal disease are not good, and improving these outcomes should be the subject of future clinical trial.

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