Clot Buster to the rescue. Saving an 11-year-old brain from Basilar Blues.

A case report of mechanical thrombectomy for ischemic stroke in a -11 year old boy.

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Introduction:

Annual incidence rates of ischemic stroke in infants and children can range from 0.6 to 7.9 in 100 000 children per year. Ischemic stroke in children also may result in significant morbidity and mortality in children.

Case:

A 11-year-old boy with no known medical illness was initially treated for Bell's palsy in other hospital. He presented to our Emergency Room with one day history of left sided facial droop and later developed right upper limbs and lower limbs weakness. 3 days prior to this, he had a fall on the road while riding his bicycle. On examination, vital signs were stable. CNS examinations revealed child has slurred speech with left facial droop, sparing forehead lines, pupils 2mm bilaterally and reactive. Muscles power both right-sided upper limbs and lower limbs were 0/5. CT brain initially was normal. MRA brain with contrast later revealed multifocal infarction as well as subacute infarction most likely secondary to vasculitis of the basilar artery. Patient underwent basilar thrombectomy under GA by intervention radiologist and followed by cerebral resus for 48 hours in PICU. The child also went through extensive rehab in-patient and made a good recovery. Extensive blood tests were also done to rule out connective tissue disease, autoimmune diseases and hematological disorders. However, all tests were normal. Differential diagnosis would be basilar artery dissection as child had history of fall.

Discussion

Multiple studies have showed that pediatrics ischemic stroke is more profound in boys. Unlike in adults, heart disease, haematological condition, vasculopathies, infection, head and neck trauma, metabolic disorder and drugs ingestion are more common etiologies for stroke. In young children, stroke can be presented as focal weakness while older children usually have hemiparesis, aphasia, visual disturbance, cerebellar signs, headache and seizure. Brain imaging should be done immediately in order to achieve diagnosis with consideration of immediate intervention. Brain MRI is more sensitive in acute time period.

Conclusion

Children who are presented to ER with acute neurological deficit should be evaluated urgently with through physical examination and urgent brain imaging to rule out stroke as immediate intervention by thrombolysis or mechanical thrombectomy can improve outcome.