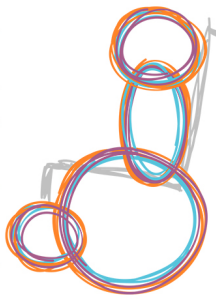


Potential markers of cerebral arteriopathy may be useful for treating stroke in children

childhood
disability
LINK



Summary

Arterial ischemic stroke (AIS) is caused by obstructed blood flow in the arteries that lead to the brain. This obstruction can have various causes, including infection or inflammation in these blood vessels. Markers that can confirm arterial inflammation, which is known as arteriopathy or angiitis, as the cause of AIS should be established so that trials for treating AIS by treating arterial inflammation can begin.

About the study

This study examined a five-year-old girl who presented with arterial ischemic stroke (AIS) confirmed to be secondary to childhood primary angiitis of the CNS (cPACNS). Steroid treatment appeared to improve the patient's condition and resolve brain blood vessel wall thickening. Moderate muscular and behavioral effects of the stroke were evident upon follow-up at 18 months after the initial presentation.

What families should know

Arterial ischemic stroke is rare in children, but is most frequently caused by infection or inflammation of the arteries in the brain. Treatment of this initial condition can improve prognoses for children who have a stroke and prevent its recurrence, so identification of markers for this condition is critical.

What practitioners should know

Currently, clear cellular evidence of inflamed blood vessels, identified from a brain biopsy, serves as the gold standard for diagnosing childhood primary angiitis of the CNS (cPACNS), or an inflammation of blood vessels in the brain. However, this evidence is very difficult to obtain, especially when large blood vessels are affected by angiitis. Better imaging markers are necessary to diagnose cPACNS and differentiate it from noninflammatory vasculopathies,

or diseases of the blood vessels that don't involve inflammation, and Moyamoya as causes for AIS. Magnetic resonance angiogram (MRA) to examine vessel wall thickening may serve as a useful marker.

Reference

Payne, E., Wei, X., & Kirton, A. (2011). Reversible wall enhancement in pediatric cerebral arteriopathy. *Canadian Journal of Neurological Science*, 38, 139-140.

Link to article :

https://www.researchgate.net/publication/49681843_Reversible_Wall_Enhancement_in_Pediatric_Cerebral_Arteriopathy