Introduction

Stroke is defined as a clinical syndrome of rapidly developing focal or global disturbance of cerebral function lasting more than 24 hours or leading to death with no apparent non-vascular aetiology [1]. The major risk factors in children include cardiac diseases like cardiomyopathies, rheumatic heart disease, endocarditis, haematological causes like sickle cell anaemia, prothrombotic disorders secondary to protein C and S deficiencies, leukaemia, lymphoma, post infectious–varicella infection, HIV infection, vascular causes like arteriovenous malformations, Moyamoya, drugs like cocaine, ecstasy, head and neck trauma resulting in dissection of carotid or vertebral arteries [1]. Ischaemic stroke resulting from minor head injury is rare in children [2], as trauma usually results in intracranial bleed. We report a case who presented with right sided hemiplegic stroke due to trivial trauma.

Case report

An 11-year-old girl, who was previously healthy, presented with weakness of right upper and lower limbs, deviation of face to left with slurring of speech of one day. There was no history of fever, seizures, ear discharge, rashes, respiratory illness, photophobia or mucocutaneous bleed. Child was disoriented at the time of admission. She was afebrile, with a blood pressure of 108/70 mmHg. Central nervous system examination revealed right sided facial paralysis, no signs of papilloedema and power of 2/5 in the right upper and lower limbs. Deep tendon reflexes were exaggerated on the right side. Meningeal signs were absent. No bruit was audible over the cranium or carotid artery.

Computed Tomography (CT) scan was normal. Magnetic Resonance Imaging (MRI) of the brain showed left sided middle cerebral artery territory infarct (Figure 1).

Magnetic resonance angiography showed left middle cerebral artery territory infarct involving the left gangliocapsular region, left corona radiata and left frontotemporal lobe, suggestive of occlusion. On enquiry mother revealed fall from stairs 3 days back.
Management of stroke involves supportive measures like reducing the increased intracranial pressure. Treatment measures should be taken to prevent further ischaemic events. Treatment schedule usually includes anticoagulation with low molecular weight heparin (LMWH) or unfractionated heparin. Haemorrhagic stroke needs to be excluded before starting treatment with LMWH [11]. Use of LMWH is controversial and recent studies have shown that there is no significant reduction in mortality or morbidity with the use of LMWH as compared to aspirin with clopidogrel combination [12]. Anti-platelets are reasonable for secondary stroke prevention. The Royal College of Physicians, International Paediatric Stroke study group recommends that thrombolysis should not be used in the treatment of paediatric stroke [1].

Conclusion

Stroke is relatively rare in children. The risk factors and clinical presentations are different as compared to adults. All possibilities should be kept in mind while dealing with paediatric stroke. A detailed history and thorough evaluation helps in proper diagnosis and management.

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