

Thrombolysis in Adolescent Stroke

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Introduction

Acute stroke in adolescent is rarely seen and can be debilitating if neurological recovery is not achieved. However, with increasing number of stroke incidence, there is an increase of cases on young adults. We present a case of acute ischaemic stroke in a 17 year old boy at our centre.

Case Description

A 17 year old Malay male presented to Emergency Department (ED) with sudden onset left sided limb weakness and numbness at 1230H while gardening with his father in school compound. He was last seen well at 1200H. He had no underlying illness, not on any medication, denies illicit substance abuse and non-smoker. Upon arrival, his GCS was E4V5M6, BP 135/71, HR 83, SPO2 100% under room air and capillary blood sugar (CBS) 4.6. Neurological examination revealed power over his left upper limb and left lower limb were 3/5 with reduced upper limb sensation over C5-C6, Cb-T1 level. Cranial nerve examination was unremarkable. The initial NIHSS was 5. Acute stroke protocol was activated and a plain CT brain done showed no obvious hypodensity or intracranial bleed. He was started on thrombolysis once consented by his parents with IV Alteplase at 1620H and completed after 1 hour. He had no significant complication during and after thrombolysis and made full neurological recovery within 24 hours. His NIHSS was 0 prior to discharge.

Discussion

Acute stroke is usually seen in adult patients with risks of developing atherosclerosis and ischaemia. However, there is an increase in younger patients developing acute stroke, including adolescent age group. Data for thrombolysis in paediatric and adolescent age group may be scarce, but there are many case reports of successful thrombolysis in these age groups. In our patient, full neurological recovery was made post thrombolysis indicating a good benefit versus risk of treatment. Risk factors including obesity and young hypertension are important points to be considered while managing our youth community.

Conclusion

Early recognition of acute stroke is essential and thrombolysis therapy should be considered for adolescent presenting with acute stroke ensuring their bright future.

Keywords: Acute stroke, thrombolysis, adolescent

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