Cerebrovascular accident in paediatric patients – Case report

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Abstract

Introduction: Stroke is one of the ten major causes of death among children and adolescents under 18. Several risk factors were established including cardiac disease, metabolic and haematological diseases, and trauma. The diagnosis of stroke poses a challenge in medical practice, not only because of the existence of multiple differential diagnosis, but also because of their prevalence. The prognosis of childhood stroke is better than the one found in adulthood, despite having a huge health and socio-economic impact in the lives of patients and their families.

Case Report: A 17-year-old female, without any relevant medical history or family disease, seeks medical attention because of an intense occipital headache, with a sudden onset and without any other red flags. Physical examination and brain computed tomography (CT) were normal. Before subsequent medical evaluation, the patient was admitted to the emergency room with progressive right hemiparesis and aphasia. New brain CT showed an extensive intraparenchymal haemorrhagic lesion with tetraventricular leakage. The patient later underwent surgical drainage. The clinical investigation revealed an arteriovenous malformation and mitral valve endocarditis. The surgical treatment was done using a biologic valvular prosthesis. Today, the patient has a residual right hemiparesis, stable hydrocephalus and a neuropsychiatric syndrome.

Conclusion: Healthcare providers must be trained in early diagnosis of paediatric cerebrovascular accidents and in identification and prevention of known risk factors. This is an essential first step in minimizing the impact of this disease.