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Vision of no return in a Teenage Girl: a Case Report and Review

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azatazolamide

Introduction

Central retinal artery occlusion (CRAO) is a vascular condition that usually presents as sudden and profound loss of vision. It is an extremely rare diagnosis in the pediatric population, and most of the cases are with underlying precipitating factors like arteritis, embolus, etc. We present a 15-year-old girl who suffered from unprovoked headache and visual field disturbance of right eye of sudden onset. Examination with us showed relative afferent papillary defect, diplopia and central scotoma in the right eye, while fundoscopic examination showed cherry red spot with flat retina and pale disc. This confirmed the diagnosis of CRAO. Further blood tests, imagings, electrocardiogram, echocardiogram and carotid Doppler did not yield any abnormalities. Conservative management with the use of intravenous azetazolamide, timolol eyedrops, ocular massage and hyperventilation were carried out for this patient. There was no sign of return of vision

Objectives

We review the literature regarding the causes of young onset CRAO and latest advancement in the management of it

Methodology

A 15-year-old girl presented with sudden onset of tunnel vision and was diagnosed as CRAO. Publications regarding young onset CRAO, its pathogenesis and management on Pubmed was reviewed and summarized.

Result

CRAO is a rare condition in pediatric population, with less than 1 in 50000 for patients under the age of 30 years old suffering from retinal artery occlusion. Recent meta-analysis published in JAMA Neurology 2015 shows that systemic fibrinolysis is beneficial at 4.5 hours or earlier after symptom onset compared with the natural history group. As a result, an early identification of the condition and early start of systemic fibrinolysis can possibly prevent the development of this vision of no return.