

Aortic Valve Thrombus, Stroke, and Endovascular Thrombectomy in a Child with APML and Trisomy 21

Gayathri Narendran¹, Adam Kirton², Gregory M.T. Guilcher¹, Mohammad Al-Najjar³, Kandice Mah⁴, Alim P. Mitha², Jay Riva-Cambrin², and MacGregor Steele³

¹University of Calgary Department of Paediatrics Post-Graduate Medical Education

²University of Calgary Department of Clinical Neurosciences

³Alberta Children's Hospital Research Institute

⁴BC Children's Hospital Study and Learning Commons

November 7, 2022

Abstract

Acute pro-myelocytic leukemia (APML) is associated with an elevated risk of bleeding and thrombosis due to disseminated intravascular coagulation that is frequently present prior to initiation of therapy. We report the case of a 13 year-old male with Trisomy 21 diagnosed with APML found to have an asymptomatic aortic valve thrombus who developed a thromboembolic arterial ischemic stroke. Endovascular thrombectomy (EVT) restored cerebral circulation and a fibrin thrombus containing APML cells was retrieved. The patient made a neurologic recovery, nearing his baseline within one week post-EVT. We highlight that thromboembolic stroke can be a rare complication in APML and present unique management challenges.

Hosted file

Aortic Valve Thrombus Stroke and Endovascular Thrombectomy in a Child with APML_October2022.docx available at <https://authorea.com/users/520510/articles/593814-aortic-valve-thrombus-stroke-and-endovascular-thrombectomy-in-a-child-with-apml-and-trisomy-21>