SPECTRUM OF ISCHEMIC NEUROVASCULAR COMPLICATIONS OF MARFAN SYNDROME

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Background: Marfan syndrome is characterized by disruption of elastic fibers in the arteries, predisposing to aneurysm formation and dissection.
Objective: To review the neurovascular complications of Marfan syndrome.
Patients and Methods: Records of inpatients with Marfan syndrome and Stroke from our Institute from 2011-2013 were reviewed.
Results: Three patients were identified.
First patient: an 18 year old commando developed sudden headache followed by mild right hemiparesis. MRI brain revealed acute infarcts in the left caudate and lentiform nuclei. MRA showed narrowing of the supraclinoid left ICA, left A1 and proximal left M1. There was possible intraluminal dissection flap in the A1 extending to M1, with intramural haematoma. Carotid ultrasound and trans-thoracic echocardiogram was normal. Stroke was attributed to intracranial dissection.
Second patient: a 42 year old female presented with right hemiparesis. At the age of 14 years, she had mitral valve repair for mitral regurgitation. Clinically she had a left hemispheric syndrome. MRI brain showed acute left fronto-temporal parietal infarcts. MRA and CTA revealed abrupt cutoff of the left MCA at its bifurcation. Trans-thoracic echocardiogram showed dilated aortic root, previous mitral valve repair and mitral stenosis. Stroke etiology: cardioembolism.
Third patient: a 52 year old male developed chest pain and syncope. On examination GCS = 4 with extensor posturing. MRI brain was normal. CT aortogram revealed aortic dissection extending into the brachiocephalic and common carotid arteries. Etiology of syncope: decreased cerebral perfusion from extensive dissection.
Conclusion: The neurovascular complications of Marfan syndrome ranged from cardioembolism to extra and intracranial dissection.