THE NEW ZEALAND MEDICAL JOURNAL
Journal of the New Zealand Medical Association

Aortic aneurysm in a girl with Takayasu's arteritis

Selim Doganay, Ercan Kocakoc, Yasar Sen

Takayasu's arteritis is a large vessel vasculitis of unknown aetiology that mainly affects the aorta and its major branches, pulmonary arteries and coronary arteries.[1] The disease is a form of panarteritis, beginning with inflammation of the adventitia with subsequent involvement of the media and intima. This results in luminal abnormalities like stenosis, occlusion, dilatation and aneurysm formation of the involved vessels.[2]

Figure 1. 3D contrast-enhanced MR angiography oblique sagittal image shows multiple aneurysmatic dilatations of thoracoabdominal aorta (arrows)

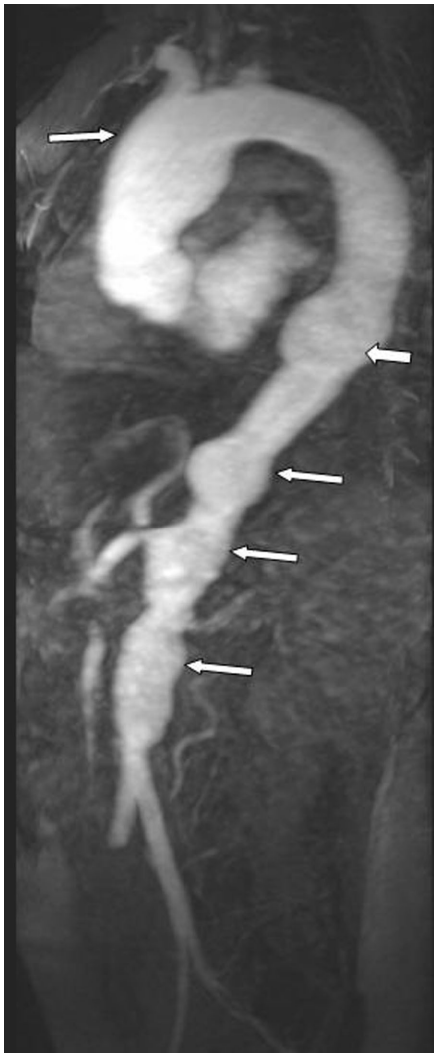
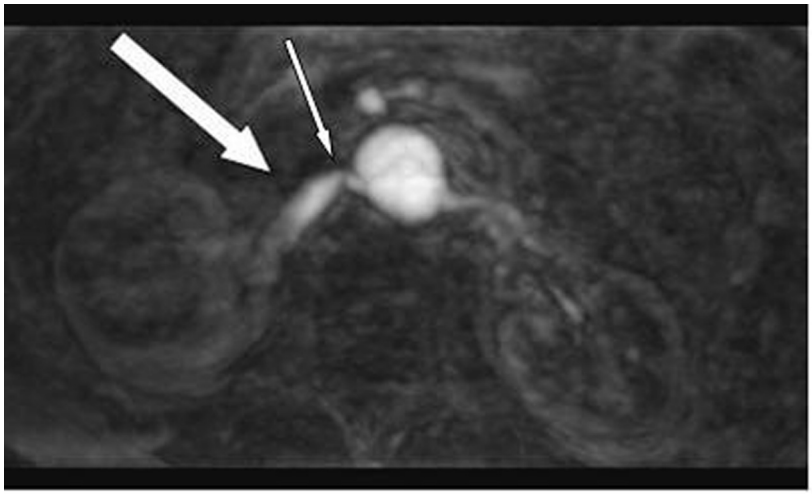


Figure 2. Contrast-enhanced MR angiography axial image shows severe stenosis (thin arrow) and poststenotic dilatation on the right main renal artery (thick arrow)



©NZMA

A 15-year-old girl was admitted with a history of mild abdominal pain and back ache for a year. Blood pressure was 100/70 mmHg in the left arm, 80/60 mmHg in the right arm, and 130/90 mmHg in the both legs. On the physical examination there was bruit on the abdomen. Three-dimensional contrast-enhanced MR angiography showed narrow segments and accompanied multiple aneurysmatic dilatations of thoracoabdominal aorta (Figure 1) and severe stenosis and poststenotic dilatation on the right main renal artery (Figure 2). Additionally, there was tortuosity, irregularity, and thickening of aortic wall.

Based on these clinical and imaging findings, she was diagnosed with Takayasu's arteritis.

Author information: Selim Doganay[1]; Ercan Kocakoc[2]; Yasar Sen[3]

[1]Department of Radiology, Faculty of Medicine, Erciyes University, Kayseri, Turkey

[2]Department of Radiology, Faculty of Medicine, Firat University, Elazig, Turkey

[3]Department of Pediatric Endocrinology, Faculty of Medicine, Firat University, Elazig, Turkey

Correspondence: Selim Doganay M.D., Yildirim Beyazit Mah. Adalar Sok. Camlica Apt. No 1/12, Melikgazi, 38039, Kayseri, Turkey. Fax: +90 (352) 4373719; email: selimdoganay@gmail.com

References:

1. Yamato M, Lecky J, Hiramatsu K, Kohda E. Takayasu Arteritis: radiographic and angiographic findings in 59 patients. Radiology. 1986;161:329–334.
2. Liu YO. Radiology of aortoarteritis. Radio Clin North Am. 1985;23:671–688.