Images in Cardiovascular Medicine

http://dx.doi.org/10.4070/kcj.2013.43.8.578
Print ISSN 1738-5520 • On-line ISSN 1738-5555

kcj
Korean Circulation Journal

A Rare Congenital Anomaly: Interrupted Aortic Arch and Giant Ascending Aortic Aneurysm in a Young Male

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Interrupted aortic arch (IAA) is a rare congenital cardiac defect defined as complete loss of luminal and anatomical continuity between the ascending and descending segments of the aorta. Very few patients can reach adult age without surgical correction. These cases showed diagnosis of the nearly asymptomatic Type A IAA with aortography and multislice computed tomography (MSCT). A 27- year-old male patient was applied to the internal medicine department with complaint of fatigue. They heard a diastolic murmur on the aortic focus and referred the patient to our cardiology polyclinic. Physical examination showed reguler heart beat with blood pressures of 150/90 mm Hg in the right arm, 140/90 mm Hg in the left arm, 100/60 mm Hg in the right limb and 100/60 mm Hg in the left limb, and there was a diastolic murmur prominently on the aortic fo-cus. Electrocardiogram was in sinus rhytm and normal. His chest ro-entgenogram (anteroposterior) showed a dilated aortic root. When we made echocardiography, we saw bicuspit aortic valve with moderate aortic regurgitation and dilatation of the ascending aorta (70 mm). Then an attemp to perform aortography via femoral artery fa-iled because the aortic arch was not able to go through. When we gave contrast, we saw that the aortic arch was interrupted. Aortography via the right brachial artery showed a giant ascending aortic aneurysm (70 mm), severe aortic regurgitation, interruption of the aortic arch distal to the left subclavian artery (Fig. 1, arrow) and prominent collateral circulation (Fig. 2, arrows). After aortography, the patient underwent a MSCT. MSCT confirmed the diagnosis of the IAA distal to the orgin of the left subclavian artery and measured the ascending aorta as 75 mm (Fig. 3, arrow). The patient was referred to an experienced surgeon on adult congenital heart diseases, but was denied surgery due to lack of symptoms. In this case, a rare congenital anomaly was detected with transcatheter aortography and MSCT diagnostic techniques, which complement each other.

Received: January 7, 2013 / **Revision Received:** February 26, 2013 / **Accepted:** April 1, 2013
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• The authors have no financial conflicts of interest.

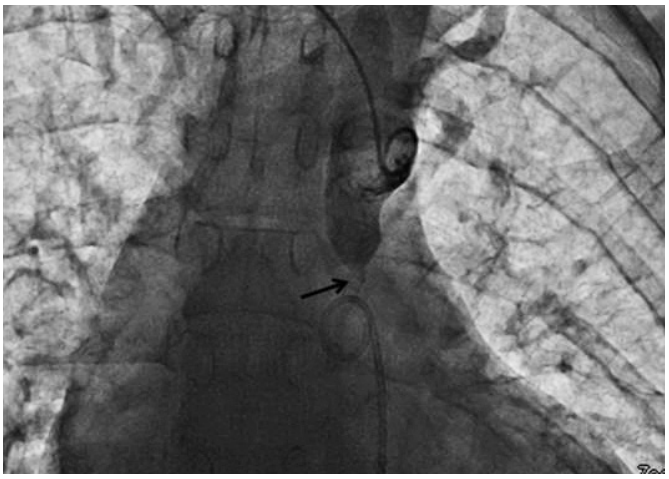

Fig. 1.

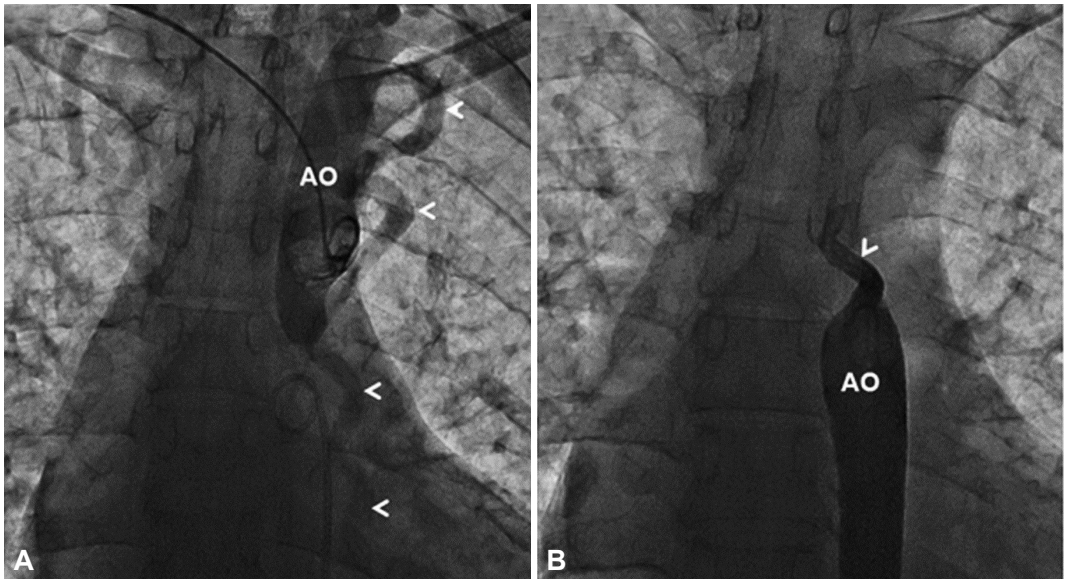

Fig. 2.

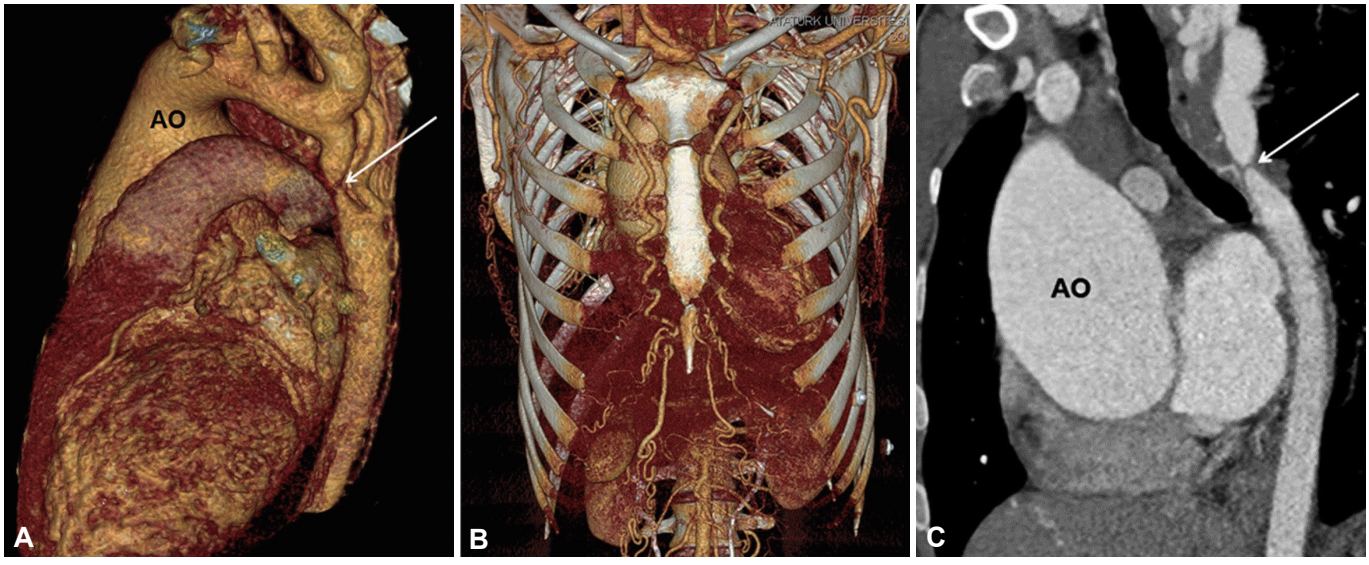

Fig. 3.

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