Aneurysms of Right-sided Descending Aorta Associated with Right-sided Aortic Arch Detected by 64-MDCT

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A 78-year-old woman was referred to our hospital for evaluation of asymptomatic descending aortic aneurysms of the right-sided descending aorta, which were incidentally diagnosed on chest X-ray (Picture 1A). Hypertension had been present for more than 18 years. Since observational CT exams showed that the aneurysms had increased in size from a maximum diameter of 5.7 cm to 6.9 cm (Picture 2E) over three years, surgery was considered to be indicated. Further investigation was performed using multidetector-row computed tomography (MDCT) (Aquilion64, TOSHIBA, Tokyo, Japan) and a workstation (ZIO STATION, ZIO SOFT, Tokyo, Japan).

MDCT can provide excellent three-dimensional images, and visualization of the aortic lesion size, location and extent. Preoperative anatomical detection is a key to treatment in patients with a right aortic arch, which is a rare congenital disorder (prevalence of 0.05-0.1%) (1). The accurate detection of aneurysms using MDCT (Pictures 1B, 2A) allows a more appropriate surgical strategy.
**Picture 2.** A) Right anterior oblique three-dimensional image showed a large thoracic aneurysm of the descending aorta and an abdominal aneurysm of the suprarenal aorta. B) Mirror-image branching of the right-side arch in the right anterior oblique view; a, left subclavian artery; b, left common carotid artery; c, right common carotid artery; d, right subclavian artery. C) Left anterior oblique view; e, aortic diverticulum (Kommerell’s diverticulum), which is often present in right-sided aortic arch. D) Contrast-enhanced axial image. Right-sided aortic arch (arrow). E) Aneurysm of the right-sided descending aorta (arrow).

**Reference**


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