

# A morbid coexistence: thrombosed descending thoracic aorta aneurysm and aortic insufficiency with aortic diastolic reverse flow

Sema Yildiz<sup>1</sup>, Nurefsan Boyaci<sup>1</sup>, Ali Yildiz<sup>2</sup>

<sup>1</sup>Department of Radiology, <sup>2</sup>Department of Cardiology, Harran University School of Medicine, 63100, Sanliurfa, Turkey

Correspondence to: Dr. Sema Yildiz, MD. Harran Üniversitesi Tıp Fakültesi Yenişehir Kampüsü Radyodiyagnostik AD 63100, Şanlıurfa, Turkey.  
Email: drsemayildiz@yahoo.com.

**Abstract:** A 76-year-old woman presented with difficulty in speech and weakness on right arm and leg. Her medical history was remarkable only for uncontrolled hypertension for a long period. Dysarthria, right central facial paralysis, right hemiparesis and hypoactive deep tendon reflexes were noticed on neurological examination. Moderate degree aortic insufficiency with aortic diastolic reverse flow was detected on transthoracic echocardiography. Thrombosed aortic aneurysm on descending thoracic aorta, and an acute hemorrhagic infarction in the distribution of the left middle cerebral artery were depicted on thorax, and brain computed tomography scans, respectively. Cerebrovascular event was medically managed and whereas conservative management was offered for thrombosed descending thoracic aorta aneurysm.

**Keywords:** Thoracic aorta aneurysm; aortic insufficiency; diastolic reverse flow

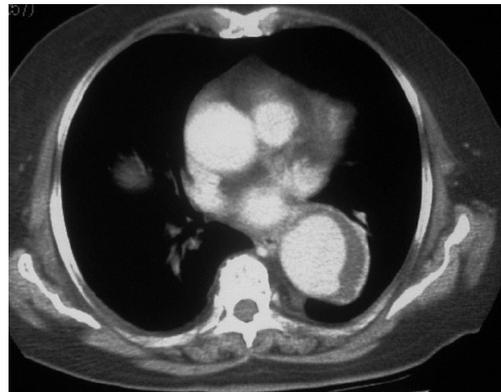
Submitted Jan 15, 2014. Accepted for publication Mar 15, 2014.

doi: 10.3978/j.issn.2223-4292.2014.10.01

View this article at: <http://dx.doi.org/10.3978/j.issn.2223-4292.2014.10.01>

A 76-year-old woman presented with difficulty in speech and weakness on right arm and leg. Her medical history was remarkable only for uncontrolled hypertension for a long period. Her blood pressure and heart rate were 230/90 mmHg (on both brachial arteries) and 100 beats per minute. On auscultation moderate degree diastolic decrescendo murmur was heard at sternal border of right second intercostal area. Dysarthria, right central facial paralysis, right hemiparesis and hypoactive deep tendon reflexes were detected on neurological examination.

Her ECG was consistent with normal sinus rhythm with poor precordial R wave progression. Moderate degree aortic insufficiency with aortic diastolic reverse flow was detected on transthoracic echocardiography with normally appearing ascending and arcus aorta besides normal left ventricular ejection fraction. Contrast enhanced computed tomography depicted thrombosed aortic aneurysm on descending thoracic aorta (*Figure 1*). Non-contrast cerebral computed tomography revealed an acute hemorrhagic infarction in the distribution



**Figure 1** Axial plane contrast enhanced thoracic computed tomography depicting thrombosed descending thoracic aorta aneurysm.

of the left middle cerebral artery (*Figure 2*). Carotid and vertebral artery Doppler ultrasonography was normal.



**Figure 2** Axial plane non-contrast enhanced cerebral computed tomography showing acute infarction in the left corona radiata, and body of caudate nucleus with peripherally hyperdense hemorrhagic component (arrows) compressing left lateral ventricle.

**Cite this article as:** Yildiz S, Boyaci N, Yildiz A. A morbid coexistence: thrombosed descending thoracic aorta aneurysm and aortic insufficiency with aortic diastolic reverse flow. *Quant Imaging Med Surg* 2014;4(5):437-438. doi: 10.3978/j.issn.2223-4292.2014.10.01

Cerebrovascular event was medically managed whereas conservative management was offered for thrombosed descending thoracic aorta aneurysm.

The vital complications of thoracic aneurysm have been reported as rupture and dissection (1). Reported case is peculiar to reveal a morbid complication of embolic cerebrovascular event in thrombosed descending thoracic aorta aneurysm and aortic insufficiency with aortic diastolic reverse flow as the plausible mechanisms underlying cerebrovascular event in the absence of carotid plaque, atrial fibrillation and left ventricular dysfunction.

*Disclosure:* The authors declare no conflict of interest.

## References

1. Eleftheriades JA. Natural History of Thoracic Aortic Aneurysms: Indications for Surgery, and Surgical Versus Nonsurgical Risks. *Ann Thorac Surg* 2002;74:S1877-80.