Clinical History
A 46 year old man presented with middle cerebral artery (MCA) territory cerebral infarct, thought to be of embolic origin. After receiving thrombolytic therapy, the patient was referred for a transesophageal echocardiography to exclude a left atrial thrombus. Approximately one week later, the patient was referred for CT angiography (CTA).

Findings
Transesophageal echocardiography demonstrated a dilated left atrium, with spontaneous echo contrast (Figure 1), showing reduced emptying velocities within the left atrial appendage, but no definite evidence of thrombus was identified. One week later, a cardiac CTA revealed incomplete opacification of the left atrial appendage, suggestive of thrombus. A delayed image was obtained, demonstrating persistent poor opacification of the left atrial appendage, most consistent with the presence of a thrombus that most likely developed in the interim between the ultrasound study and the cardiac CTA.

Discussion
64-detector-row CTA is a noninvasive and sensitive modality for detecting thrombi in the left atrial appendage of stroke patients. Currently, transesophageal echocardiography is considered the gold-standard for the detection of left atrial appendage thrombi, but multidetector cardiac CTA with delayed phase imaging has the potential to become a useful clinical modality for the detection of left atrial thrombus in patients who cannot undergo a transesophageal examination. This important cause of embolic stroke should be considered in cases of ischemic embolic neurologic events.

REFERENCES