

findings were acquired on 1.5-T scanners and that this entails some limitations. High b-value DWI requires a hardware upgrade because most scanners cannot generate a 40-mT/m gradient field [6]. Despite the lower MR signal intensity and lower signal-to-noise ratio on high b-value images [8], 3-T DWI is at least as good as, and in some ways superior to, 1.5-T DWI for assessing hyperacute stroke [9].

We postulate that one reason for missed acute ischemic stroke might be the conspicuity of acute ischemic lesions on diffusion-weighted images, which is related to the b-value. In some cases (as in this one) higher b-values might offer an opportunity for earlier lesion detection. We found that DWI<sub>4,000</sub> performed on the 3-T scanner was superior for the identification of ischemic lesions. Our findings suggest that the PWI-DWI mismatch time window is shorter than was previously thought. Studies are underway in our laboratory to determine the optimal b value for the assessment of acute stroke. Based on our findings, we suggest that high b-value DWI is useful for the selection of thrombolytic therapy in patients with acute stroke.

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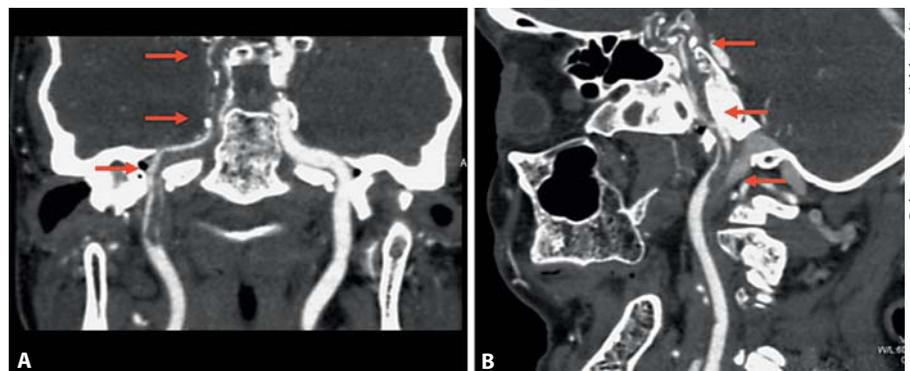
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### Large Carotid Thrombus

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A 76-year-old female with high blood pressure and atrial fibrillation as cerebrovascular risk factors was admitted because of sudden left hemiparesis and dysarthria with a right periorbital headache. Transcranial Doppler ultrasound showed increased velocity in the right carotid siphon. Her cranial CT was normal. She was anticoagulated because of carotid siphon stenosis with low-molecular-weight heparin (0.6 ml subcutaneous nadroparin calcium every 12 h). An angio-CT showed calcified plaque in the right carotid siphon with a large thrombus (fig. 1A, B), resulting in a high-grade stenosis. We suggested the thrombus formation was due to a cardiac embolus stopped in the right



**Fig. 1.** Intra- and extracranial angio-CT. Coronal and lateral projections showed a large thrombus in the right internal carotid artery (arrows, red in the online version).

Color version available online

siphon stenosis and a retrograde enlargement mechanism. The patient was under anticoagulation. An angioCT at 10 days showed complete thrombus resolution. At discharge, she had slight left ataxic hemiparesis (NIHSS = 4). At 1 year she had an mRS = 1.

This case indicates that large thrombi may be dissolved by anticoagulant therapy with low-molecular-weight heparin, although its lytic activity has never been demonstrated. The short recanalization time was probably due to an acute unorganized thrombus.

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