CT angiography and CT perfusion in post-CEA hyperperfusion syndrome

Figure CT angiography and perfusion on days 1 and 3

A 66-year-old woman developed transient right hemiparesis 1 day after left carotid endarterectomy (CEA) for asymptomatic severe internal carotid artery stenosis. CT perfusion showed relatively decreased mean transit time in the left middle cerebral artery (LMCA) territory. CT angiography showed normal LMCA caliber. On day 3 she developed new aphasia and hypertension to 240/110 mm Hg. Head CT/CT angiogram showed new lobar hemorrhage; the LMCA branches were now markedly dilated (figure). These clinical-imaging features are consistent with post-CEA hyperperfusion syndrome.¹ The dynamic LMCA dilation documented in our patient supports the hypothesis that disturbed cerebral autoregulation is the underlying pathophysiology.

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Disclosure: The authors report no conflicts of interest.

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REFERENCE

1. Karapanayiotides T, Meuli R, Devuyst G, et al. Postcarotid endarterectomy hyperperfusion or reperfusion syndrome. *Stroke* 2005;36:21–26.

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Neurology 2007;68;1437

DOI 10.1212/01.wnl.0000260621.86593.39

This information is current as of April 23, 2007

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