Hyperdense Basilar Artery Sign

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Picture 1.

A 93-year-old man with hypertension presented with a sudden disturbance of consciousness. A neurological examination revealed a loss of consciousness with a Glasgow Coma Scale score of 6 (E1V1M4), ataxic respiration and bilateral miosis. Adjacent slices from a brain computed tomography performed three hours after the onset (AO) showed a hyperdense change of the basilar artery (BA) (Pic-

ture 1A-C, arrow), thus indicating a hyperdense basilar artery (HDBA) sign (1). Brain fluid-attenuated inversion recovery images obtained four hours AO demonstrated a hyperintense signal of the BA, suggesting a complete occlusion due to an embolus or thrombus (Picture 1D, arrow head) (2). Brain diffusion-weighted images (Picture 2) revealed fresh infarctions of the bilateral cerebellum, pons and

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Picture 2.

midbrain. The patient died from respiratory failure seven hours AO. The presence of a HDBA sign therefore suggests the occurrence of both basilar artery occlusion and brain-stem infarction and may predict a poor prognosis for such patients (1).

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