Hyperdense Basilar Artery Sign

Hirofumi Goto¹, Tatsuya Tanaka², Masahito Yoshida³ and Nobuaki Momozaki²

Key words: basilar artery occlusion, hyperdense basilar artery sign

(DOI: 10.2169/internalmedicine.54.3338)

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) (Picture 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...
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 brainstem infarction and may predict a poor prognosis for such patients (1).

The authors state that they have no Conflict of Interest (COI).

References
