Carotid artery dissection and delayed onset stroke caused by a minor blunt trauma in daily life

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Objective: We present a case of traumatic CCA dissection and delayed onset stroke caused by a minor blunt trauma in a young office worker. Case Description: A 29-year-old woman slipped down and bumped against the corner of a table in her workplace. After the trauma, she felt dull pain in the neck without a bruise. Next day, she had mild headache and saw a black spot in front of her eye fields intermittently. However, symptoms got improved immediately. On the third day, dysarthria and left hemiplegia were developed suddenly. Neck CTA showed nearly total long segmental occlusion of right mid to distal CCA. Brain MRI and MRA displayed acute cerebral infarction on right basal ganglia, partial embolic occlusion at distal M1 segment of right MCA, decreased flow related enhancement in right ICA and no visualization of flow related enhancement in right CCA. TFCA revealed thrombotic occlusion of right proximal CCA. There were no abnormal laboratory findings but slightly increased LDL cholesterol and triglyceride. She was diagnosed as CCA dissection and delayed-onset cerebral infarction caused by blunt trauma. She took medication and received occupational therapy for 2 months and showed significant functional improvement except slightly decreased fine motor control of left hand. Conclusion: Even a minor blunt trauma that can be accidentally occurred in daily life may cause serious vascular events or stroke. In this case, the probable injury mechanism to the carotid artery might be direct blow and the stretch of carotid artery by neck hyperextension posture.