A 51-year-old man with vegetative status and decerebrate posture presented with 3 days of excessive sweating in the right forehead, right face, right upper chest and right upper limb. He had a craniotomy because of hypertensive intracerebral hemorrhage over left basal ganglia with ventricular extension 20 days ago (Fig. 1). On physical examination, hyperhidrosis involved right face (Fig. 2), right trunk above nipple and right upper limb, especially of right forehead and right hand. Body temperature of right axillary region was one degree (in Celsius) higher than that over left side. Neurological examinations revealed no signs of papillary sympathetic dysfunction or Horner’s syndrome. Laboratory examination was unremarkable. The contralateral hyperhidrosis improved 23 days later without any treatment.

Abnormal sweating has been documented as a manifestation of autonomic disorder in stroke. However, unilateral hyperhidrosis has been infrequently described in patients after contralateral cerebral strokes. In a series of 633 consecutive strokes reported by Lubar et al.,
hemihyperhidrosis was observed in 3 patients. It was recorded only five in another series of 350 consecutive strokes\(^1\). The incidence is approximately 1-2\%. Although the pathophysiological mechanisms of contralateral hyperhidrosis remains obscure, this phenomenon may be hypothesized as the disruption of putative inhibitory neural pathways which originate in the operculum, project to the hypothalamus, descend to the brain stem, cross in the medulla and connect the contralateral thoracic spinal cord, controlling sweating of the contralateral face and body\(^3\).

References: