Intracerebral hemorrhage due to rupture of an intracranial aneurysm usually occurs in stereotypical locations adjacent to the aneurysm.5 Perisylvian frontotemporal hematoma is most commonly associated with a ruptured middle cerebral artery (MCA) aneurysm.1–5

This 68-year-old man became unconscious while in his bathroom. At presentation to the emergency department he was awake, disoriented, and complained of headache. Computerized tomography (CT) scanning demonstrated a left perisylvian frontotemporal hematoma and subarachnoid hemorrhage (SAH), most concentrated in the left sylvian cistern (Fig. 1). Cerebral angiography revealed an 8-mm bilobed anterior communicating artery (ACoA) aneurysm (Fig. 2). The patient underwent a right frontotemporal craniotomy and transsylvian exposure of the ACoA aneurysm. Early in the dissection, the aneurysm spontaneously hemorrhaged from the apex of the lobe of the aneurysm projecting toward the left, suggesting that it had recently ruptured. The aneurysm was successfully clipped, and the patient made a complete recovery.

When perisylvian frontotemporal hemorrhage is caused by aneurysm rupture, an MCA aneurysm is the usual source.1–5 The present case demonstrates that, rarely, this pattern of intracerebral hemorrhage can be caused by rupture of an ACoA aneurysm. Presumably, the lobe of the aneurysm projecting directly horizontally ruptured, with the initial jet of blood traversing the basal sylvian cistern with sufficient force to enter the brain parenchyma. Anterior communicating artery aneurysm should be considered in the diagnostic workup or during emergency operative exploration of a perisylvian frontotemporal hematoma.

References