European Neurology

Received: August 7, 2009
Accepted: August 8, 2009
Published online: January 26, 2010

Eur Neurol 2010;63:127–128
DOI: 10.1159/000277612

Atypical Blood Supply to the Cerebellar Hemispheres by Isolated Superior Cerebellar Arteries

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Key Words
Stroke · Posterior circulation · Vascular variation · Cerebellar arteries

Anatomical variations of blood supply to the cerebellum are not rare [1]. We here describe the case of a 35-year-old healthy man who presented vertebrobasilar symptoms after a cervical trauma during snowboarding and a delayed clinical worsening with vomiting and drowsiness. Neuroimaging (fig. 1) revealed an almost complete left hemispheric cerebellar stroke with signs of herniation. The MRI angiography demonstrated a particular blood supply to both cerebellar hemispheres by isolated superior cerebellar arteries (SCA) and a left SCA occlusion. We hypothesize that a traumatic dissection of the left SCA was responsible for its occlusion and the consecutive cerebellar infarction. This case illustrates a rare variation of blood supply to the cerebellum [2].

References

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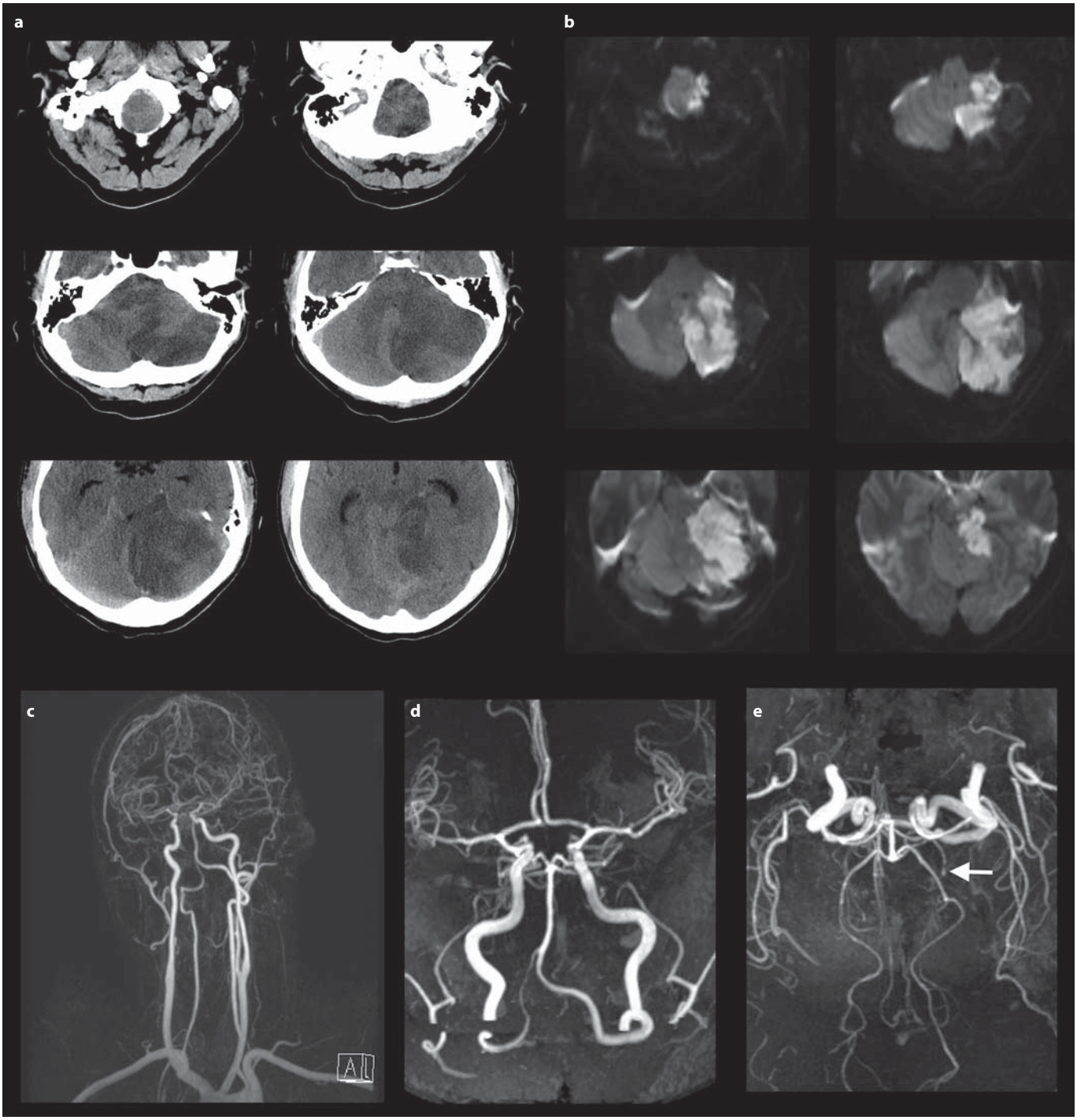

Fig. 1. a, **b** Horizontal sections demonstrating a large infarction within the left cerebellar hemisphere (**a** CT, **b** DWI-MRI) and left pontine and posterior mesencephalon (DWI-MRI). **c–e** Angio-MRI. **c** Cervical fast imaging with steady-state precession with gadolinium bolus showing the normal VAs. Note the hypoplasic aspect of the RVA. **d**, **e** Intracranial time-of-flight angiography. Note the absence of AICA and PICA bilaterally, and the stop on distal left SCA (**e**, white arrow).