A 58-year-old female admitted herself to the emergency department with progressive left-sided facial hypoesthesia. Magnetic resonance imaging revealed a 20 mm-sized aneurysm of the left vertebral artery leading to compression of the trigeminal nerve. An endovascular occlusion with a combined coiling and flow-diverter was performed. The left posterior inferior cerebellar artery (PICA) arised from the aneurysmal sac. Despite an extensive infarction of the left PICA-territory, the patient convalesced well and presented completely independent and without symptoms at the 4-week follow-up.