Transvenous embolization of thalamic arteriovenous malformation under transient cardiac standstill

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Transvenous embolization (TE) has been increasingly applied for arteriovenous malformation (AVM) treatment. Transient cardiac standstill (TCS) has been described in cerebrovascular surgery but is uncommon for endovascular embolization. The authors present a patient with a ruptured thalamic AVM in whom both techniques were applied simultaneously. Surgery was considered, but the patient refused. Transarterial embolization was performed with an incomplete result. The deep-seated draining vein provided sole access to the AVM. A microcatheter was advanced into the draining vein. Under TCS, achieved with rapid ventricular pacing, complete AVM embolization was obtained. One-year magnetic resonance imaging and cerebral angiography demonstrated no residual AVM.

The video can be found here: https://youtu.be/CAzb9md_xBU.

KEYWORDS thalamic arteriovenous malformation; transient cardiac standstill; transvenous embolization; rapid ventricular pacing; video

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