

TrelliX® Embolic Coils

FOR ELECTIVE TREATMENT OF AN AZYGOS PERICALLOSAL ARTERY ANEURYSM

CASE STUDY

Odense University Hospital
Odense, Denmark

Gyula Gál, MD
Department of Radiology

Azygos pericallosal artery is a rare anatomical variation, when the first segment of the artery is common for both sides. Since this vessel supplies both distal segments of the right and left pericallosal arteries, it is not uncommon to see aneurysm developing at the bifurcation, due to the high flow.

A 59-year-old male with known hypertension presented with sudden, severe headache at his local hospital. Physical examination revealed no neurological deficit. Computed tomography (CT) and lumbar puncture ruled out bleeding, but an aneurysm was suspected at the level of the genu of the corpus callosum. A CT angiogram 2 days later confirmed a 9x6x4 mm, wide-necked aneurysm at the bifurcation of an azygos pericallosal artery, and the patient was referred to the Department of Neurosurgery at the Odense University Hospital. After discussion at the weekly neurovascular conference, the patient was offered endovascular treatment.

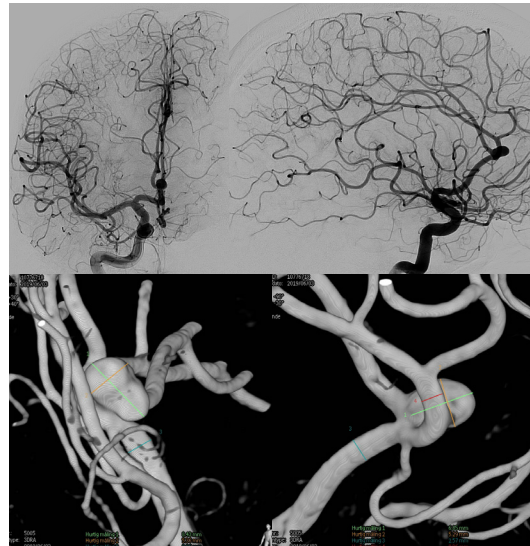
Under general anesthesia, following premedication with dual antiplatelet therapy (DAPT) and systemic heparinisation, a 6F Envoy (Johnson & Johnson) guiding catheter was placed in the right internal carotid artery (ICA), and a Headway (Terumo) 0,017" microcatheter over an Asahi Chikai (Asahi Intecc) 0,014" micro guidewire navigated through the azygos segment to the left pericallosal artery. After that, a Prowler Select Plus (Johnson & Johnson) microcatheter was navigated over the same microguidewire into the azygos segment, with the tip placed in the aneurysm. The aneurysm was then packed with the following 3 Trellix Embolic Coils: 4x10, 3x8, 3x2 (packing density per Angiocalc: 18% prior to the expansion of the shape memory polymer, 69% with maximum expansion of the shape memory polymer). Finally, a 3,5x15 Accero (Acandis) stent was placed through the Headway (Terumo), from the left A3 to the azygos A2, covering the wide neck of the aneurysm. Final angiogram showed reduced flow and stagnation in the aneurysm, and intact circulation in the right ICA and its branches. The patient woke up neurologically intact and was discharged the following day. He remained on DAPT for 3 months, and aspirin for an additional 3 months.

Follow up digital subtraction angiogram of the right ICA at 15 months showed complete and sustained occlusion of the aneurysm and intact circulation.

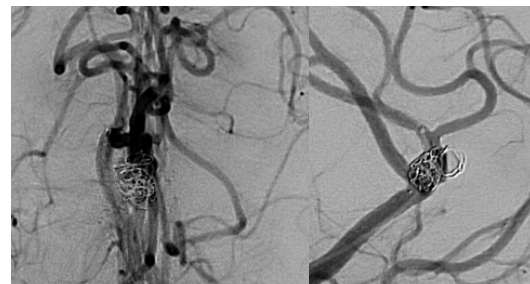
INDICATION: The Trellix Embolic Coil System is intended to obstruct or occlude blood flow in vascular abnormalities of the neurovascular and peripheral vessels. Indications include intracranial aneurysms, other neurovascular abnormalities such as arteriovenous malformations and arteriovenous fistulae, and arterial and venous embolizations in the peripheral vasculature.

INDICATION: The Trellix Detachment Controller System is intended for use with the Trellix Embolic Coil System which is intended to obstruct or occlude blood flow in vascular abnormalities of the neurovascular and peripheral vessels. Indications include intracranial aneurysms, other neurovascular abnormalities such as arteriovenous malformations and arteriovenous fistulae, and arterial and venous embolizations in the peripheral vasculature.

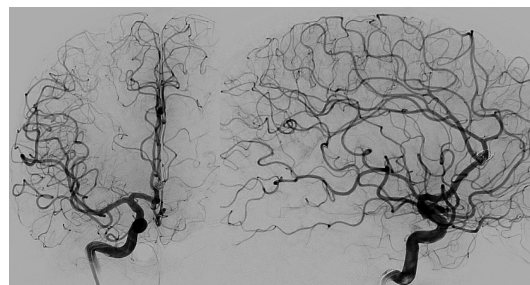
BASELINE IMAGING



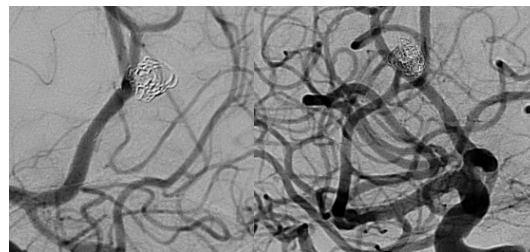
POST TREATMENT



FINAL ANGIOGRAM



15-MONTH FOLLOW-UP



Patent: www.shapemem.com/patents
Shape Memory Medical and Trellix are registered trademarks of Shape Memory Medical Inc.

Indications, contraindications, warnings, and instructions for use can be found in the product labeling supplied with each device.

CE 0297

LTI041 Rev C.

shape
memory medical

© 2021 Shape Memory Medical Inc. All rights reserved.
807 Aldo Avenue, Suite 109, Santa Clara, CA 95054 USA
+1.408.649.5175 info@shapemem.com | www.shapemem.com