

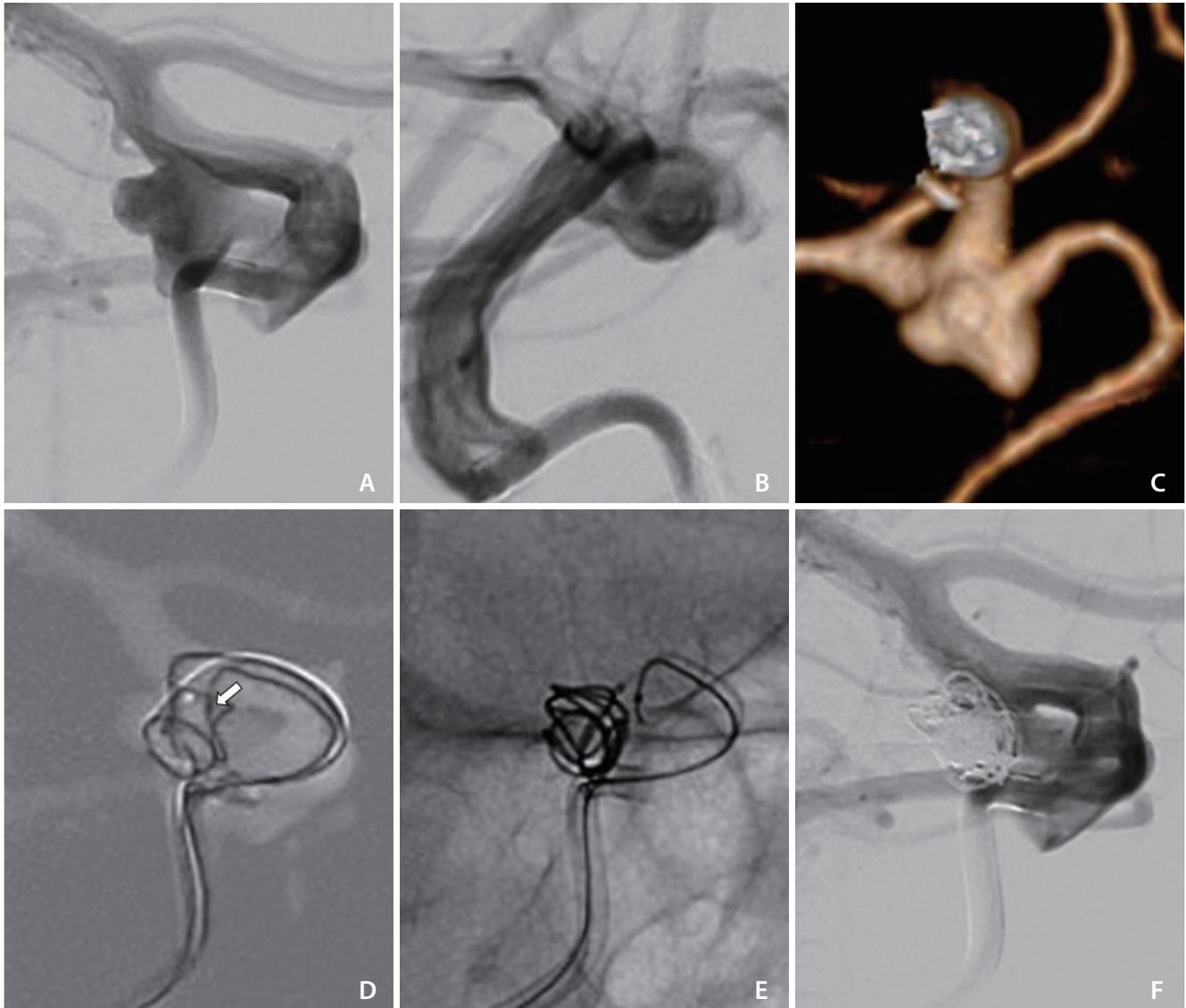
SUPPLEMENTARY MATERIAL

Case

A 72-year-old female patient was urgently admitted for a Hunt and Kosnik Grade 3 subarachnoid hemorrhage caused by rupture of a right internal carotid-posterior communicating artery aneurysm. Coil embolization was performed the day after admission.

DSA revealed a wide-neck internal carotid-posterior communicating artery aneurysm with blebs, which was 6 mm in dome height and 5 mm in neck width. The aneurysm aspect ratio was 1.2. The Pcom was incorporated into the aneurysm neck (Supplementary Fig. A–C). Due to aneurysm rupture, we could not use an intracranial stent. Therefore, we initially attempted to treat the aneurysm using a simple technique using the Target 360 XL Soft 5 mm×10 cm (Stryker-Neurovascular, Kalamazoo, MI, USA) from the first microcatheter in the aneurysmal sac but failed to preserve the Pcom due to coil protrusion. We introduced the second microcatheter into

the internal carotid artery near the aneurysmal proximal neck and attempted parent artery complex coil protection with the Target 360 Ultra 4 mm×8 cm. The protection coil size (4 mm) was decided according to the total length of the internal carotid artery diameter (2.5 mm) and the Pcom diameter (1.5 mm). First, the framing coil was partially inserted into the sac without protrusion. After the protection coil was partially inserted at the aneurysmal neck near the Pcom (Supplementary Fig. D), the first framing coil was inserted gradually. Although microcatheter control and repetitive protection coil insertion were needed, finally the optimal framing was achieved. Stability of the framing coil and preservation of the incorporated branch were confirmed after withdrawing the protection coil (Supplementary Fig. E). Eight coils with a total length of 40.5 cm were inserted into the aneurysm (Supplementary Fig. F). Magnetic resonance DWI image after the procedure showed no ischemic area.



Supplementary Fig. (A, B) Working views of the right internal carotid angiograms show a wide neck IC-PC aneurysm with blebs. (C) VR image of the aneurysm shows the side branched posterior communicating artery. (D) First framing coil was inserted with the parent artery coil protection from the second microcatheter (white arrow). (E) Stability of the framing coil was confirmed after withdrawing the protection coil. (F) Right internal carotid angiograms after the procedure show good obliteration of the aneurysm and preservation of Pcom orifice. IC-PC, internal carotid-posterior communicating artery; VR, volume rendering; Pcom, posterior communicating artery.