Trapping and V3–radial artery graft–V4 bypass for ruptured dissecting aneurysm of the vertebral artery

Tomohiro Inoue, M.D., Akira Tamura, M.D., Ph.D., and Isamu Saito, M.D., Ph.D.

Department of Neurosurgery, Fuji Brain Institute and Hospital, Shizuoka, Japan

The authors show a surgical technique of trapping/resection of ruptured dominant vertebral artery aneurysm in conjunction with reconstruction of vertebral artery by V3–radial artery (RA) graft–V4 bypass through suboccipital craniotomy and far lateral approach. Step by step muscle dissection in posterior fossa enable fine exposure of occipital artery for possible OA-PICA bypass and V3 portion of vertebral artery. Extradural drilling of posterior one-third condyle and condylar fossa facilitate exposure of triangular surgical corridor made by medulla, spinal root of 11th nerve and lower cranial nerves, and thus enabling aneurismal resection and RA–V4 anastomosis.

The video can be found here: http://youtu.be/LxsARGdHSVw.

KEY WORDS  dissecting aneurysm; vertebral artery; radial artery graft