Cranio-orbito-zygomatic approach for a previously coiled/ recurrent giant MCA aneurysm in a hybrid angio/OR suite

Leopold Arko, M.D.,¹ Eric Quach, B.S.,² Vishad Sukul, M.D.,¹ Anuj Desai, B.S.,² Kelly Gassie, B.S.,³
and Kadir Erkmen, M.D.^{1,2}

¹Department of Neurosurgery, Temple University Hospital; ²Temple University School of Medicine, Philadelphia, Pennsylvania; and ³Quillen College of Medicine, East Tennessee State University, Johnson City, Tennessee

We present surgical clipping of a giant middle cerebral artery aneurysm. The patient is a 64-year-old woman who suffered subarachnoid hemorrhage in 2005. She was treated with coiling of the aneurysm at an outside institution. She presented to our clinic with headaches and was found on angiography to have giant recurrence of the aneurysm. To allow adequate exposure for clipping, we performed the surgery through a cranio-orbito-zygomatic (COZ) skull base approach, which is demonstrated. The surgery was performed in an operating room/angiography hybrid suite allowing for high quality intraoperative angiography. The technique and room flow are also demonstrated.

The video can be found here: <http://youtu.be/eePcyOMi85M>.

KEYWORDS COZ; cranio-orbito-zygomatic approach; skull base approach; hybrid angiography; video

SUBMITTED September 1, 2014. **ACCEPTED** January 27, 2015.

INCLUDE WHEN CITING Published online July 1, 2015; DOI: <http://thejns.org/doi/abs/10.3171/2015.7.FocusVid.14593>.

CORRESPONDENCE Kadir Erkmen, M.D., Department of Neurosurgery, Temple University School of Medicine, 3401 North Broad Street, Suite C540, Philadelphia, PA 19140. email: Kadir.erkmen1@gmail.com.