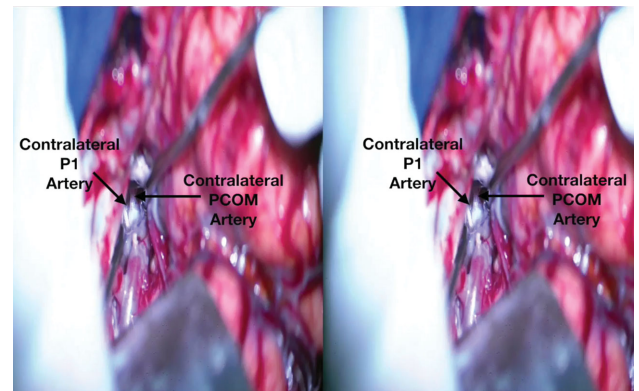


# Microsurgery for Upper Basilar Tip Aneurysm With Intraoperative Rupture: 3-Dimensional Operative Video

Oliver Soto Granados, MD, Marcos Devanir Silva da Costa, MD, MSc, Bruno Lourenço Costa, MD, Kléber González-Echeverría, MD, Samantha Lorena Paganelli, MD, Ricardo Lourenço Caramanti, MD, Helbert Palmiero, MD, Feres Chaddad-Neto, MD, PhD

Department of Neurosurgery, Federal University of São Paulo, São Paulo, São Paulo, Brazil

**Correspondence:** Marcos Devanir Silva da Costa, MD, MSc, Federal University of Sao Paulo, Rua Napoleao de Barros, 715, 6th floor, 04024-001, São Paulo-SP, Brazil.  
E-mail: [marcoscostaneuro@gmail.com](mailto:marcoscostaneuro@gmail.com)



Watch now at <https://academic.oup.com/ons/article-lookup/doi/10.1093/ons/opy179>

In the last years, a shift from the microsurgical treatment to an endovascular therapy in patients with basilar apex aneurysm has been settled, part of this phenomenon is related to the significant tendency of vital perforators to be involved in the aneurysm dissection and clipping, which can implicate unfavorable outcomes. Nevertheless, microsurgical treatment remains the treatment that can provide the superior rates of stable and durable aneurysm occlusion, which is most important to young patients.

In this video, we present the case of a 45-yr-old female patient who complained of a sudden and severe headache and presented with progressive lethargy during the following 3 d.

At admission, computed tomography did not show abnormal findings. However, cerebrospinal fluid analysis showed erythrocytes and corroborated the clinical

suspicion of spontaneous subarachnoid hemorrhage. The patient signed the Institutional Consent Form, which allows the use of his/her images and videos for any type of medical publications in conferences and/or scientific articles.

Angiography and magnetic resonance imaging revealed a saccular basilar apex aneurysm. It showed a wide neck as well as a lobulated dome with upward and slightly left projection. The aneurysm did not involve angiographically visible thalamoperforator arteries, which allowed the microsurgical treatment by the fronto-orbitozygomatic approach. However, during the interpeduncular cistern dissection, an intraoperative rupture of the aneurysm occurred. This video exemplifies the steps required to manage an intraoperative rupture of a basilar apex aneurysm.

**KEY WORDS:** Basilar artery, Basilar tip aneurysm, Ruptured aneurysm, Cerebrovascular surgery

*Operative Neurosurgery* 0:1, 2018

DOI:10.1093/ons/opy179

Received, November 19, 2017. Accepted, June 15, 2018.

## Disclosure

The authors have no personal, financial, or institutional interest in any of the drugs, materials, or devices described in this article.