Microsurgical Treatment of Unruptured ACOMM Aneurysms. Approaches and Outcomes in a Large Series of 300 Patients
Poster 1174

Eric S. Nussbaum, Jillienne Touchette, Jeff Lassig, Jim Goddard, Micheal Madison, Jodi Lowary, Leslie Nussbaum

National Brain Aneurysm & Tumor Center, Midwest Radiology, Twin Cities, MN, USA
Disclosure

• None
Introduction

• With expanded endovascular therapeutic options, fewer aneurysms are being managed with open surgery

• The role of open surgery vs endovascular therapy remains unclear in the management of unruptured ACOMM Aneurysms

• We describe a large series of unruptured ACOMMA aneurysms managed with open surgery to provide a basis for future outcomes comparison
Methods

• We retrospectively reviewed a database of over 10000 patients managed from 1997 to 2017 treated for an intracranial aneurysm

• We identified all patients who underwent open surgery for an ACOMMA aneurysm

• Complete medical records, neuro-imaging studies, and outcomes were reviewed in these cases
Results

• 300 patients with 300 unruptured ACOMMAA treated surgically
• Largest such series of unruptured ACOMMAA reported
• Mean age 40 years, 180 women
• 245 small, 50 large, 5 giant
• 253 underwent pterional, 35 OZ, 12 interhemispheric approaches
• 284 had >95 aneurysm occlusion, 13 had 90-95% occlusion, 3 were wrapped
Results - II

- Serious complications in 3 (1%)
- 2 died (0.7%)
- Minor complications in 12 (4%)
- At final follow-up, 297 patients (99%) were in good condition
Discussion

• Given clinical equipoise regarding ACOMMA aneurysm management, we describe a large series of patients
• This work may be useful as a benchmark for outcomes comparison
• Future series should separate aneurysms based on rupture status and anatomical orientation since some lesions (those directed posteriorly for example), may be best treated endovascularly while those directed anteriorly/inferiorly may be best treated with open surgery
Summary

• IN a large series of unruptured ACOMMA aneurysms, open microsurgery remains an important treatment option
• A multidisciplinary team evaluating all cases may yield optimal outcomes
• Surgical approaches tailored to individual anatomical configurations may yield best results
• Future studies should compare outcomes for “similarly” sized and oriented aneurysms to help determine best practice for these patients

• Thank you!