Cerebral Revascularization for Complex Intracranial Aneurysms. A single center experience with 131 cases
Poster 1044

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Disclosure

• None
Introduction

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

• Microsurgery has focused increasingly on complex, “unclippable” aneurysms

• We describe a large series of complex aneurysms managed with some form of cerebral revascularization
Methods

• We retrospectively reviewed a database of over 10000 patients managed from 1997 to 2017 treated for an intracranial aneurysm
• We identified patients who underwent some form of open revascularization as part of the treatment of their aneurysm
• Complete medical records, neuro-imaging studies, and outcomes were reviewed in these cases
Results

- 131 patients underwent revascularization for a complex aneurysm
- 102 (78%) ruptured, 103 (78.6%) anterior circulation
- Sizes were giant in 104 (79.4%), large in 10 (7.6%), small in 17 (13%)
- There were 89 low flow bypasses, 32 high flow, 11 in situ or IC-IC
- At follow-up, 98.9% of low flow and 93.8% of high flow bypasses were patent
Results - II

- Good outcomes (mRS< or =2) in 117 (89%)
- 4 (3%) had mrs of 3
- 6 (5%) had mrs 4-5
- 4 (3%) died
Discussion

- Endovascular therapy continues to expand, limiting number of aneurysms treated surgically
- Today, a large percentage of patients coming to surgery have giant and/or complex lesions not easily treated with simple clipping
- We have used revasc combined with parent artery sacrifice successfully in a large series of patients, offering very reasonable results
- Simple proximal or distal occlusion rather than trapping worked well in almost all cases
Summary

• IN a large series of complex aneurysms, parent artery occlusion with distal revasc may be a reasonable option even in today’s endovascular world

• We feel that focusing on simple PAO rather than trapping and lower flow bypass options helped to limit complications in our series

• Thank you!