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## Surgery for Complex Vascular Lesions in Endovascular Era

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### Resumen

Even with advances in neurovascular field, complex intracranial aneurysms, vascular malformations and ischemic conditions still pose a significant challenge to vascular neurosurgeons and neuro-interventionists. For example, complex aneurysms constitute up to 13.5% of all intracranial aneurysms with an average reported incidence of 5%. The cavernous or ophthalmic segments of the internal carotid artery and middle cerebral artery are most common locations. The natural history of untreated complex aneurysms is poor and management is often arduous or even impossible with standard treatment methods. Complex and giant aneurysms can be treated safely and effectively with microsurgical techniques such as clip reconstruction or aneurysm trapping with extracranial to intracranial bypass with very low morbidity. Similar to complex aneurysms, management of complex vascular malformations can be challenging due to their location, grades and angiographic configurations. The morbidity in management of these lesions can be reduced with careful planning, using neuroanatomy as a guidance, minimizing brain retraction and wide microsurgical dissection. In this presentation, I describe my microsurgical technique with contemporary refinements and neuroanatomical guidance in treatment of complex aneurysms, vascular malformations or ischemic conditions in endovascular era.