

# Giant and very large intracranial aneurysms: possibility of clipping and its durability

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## Introduction

Complete endovascular coiling of giant intracranial aneurysms is not usually possible and results in 60% recanalization rate and failure. To compare with surgical clipping we reviewed our experience with giant intracranial aneurysms focusing on the possibility of clipping and its durability.

## Methods

Data for fifty patients with fifty-two giant aneurysms were prospectively recorded and retrospectively analyzed. The surgical techniques used included wide skull base exposure and clipping, bypass procedure and endovascular occlusion, trapping and attempt at clipping. Clinical follow-up including cerebral angiography was obtained in all patients.

## Results

There were 24 paraclinoid region, 9 middle cerebral, 6 basilar, 5 posterior communicating, 3 anterior communicating and 2 posterior cerebral artery aneurysms. Thirty-four were females. Twenty-two were symptomatic unruptured, 19 were ruptured and 9 were asymptomatic. Successful clipping was possible in 42 patients (84%), bypass and trapping was done in two, trapping without bypass in one and five patients could not be clipped. Permanent surgical related morbidity was 7.7% (severe in 2% and moderate in 5.5%). At one year, the Rankin scale of (0-2) was in 45 (90%) and (3-6) in 3 (6%).

Two died from nonsurgical co-morbidities. Follow-up angiography did not show evidence of regrowth, and none of the cases rebled.

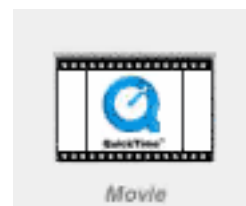
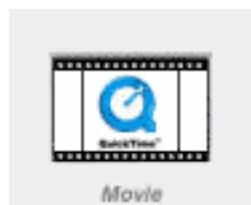
## Conclusions

The high chance of clipping a giant aneurysm and its durability is at the present time superior to the high recanalization rate of endovascular techniques and should be the first option of choice for the treatment of giant aneurysms.

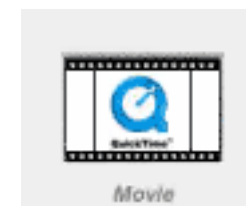
## Learning Objectives

The learner will be able to:

1. know the clipability of giant and large aneurysms as it compares with endovascular treatments
2. learn about techniques and factors that enhance the surgeons abilities to clip giant and very large aneurysms.
3. learn the differences in long term outcomes between advanced microsurgical techniques and endovascular therapy as it relates to very large and giant aneurysms



## Transcavernous approach. Basilar Aneurysm and Perforator Free Zone.



## References

Sluzewski M, Menovsky T, van Rooij WJ, Wijnalda D:Coiling of Very Large or Giant Cerebral Aneurysms: Long-Term Clinical and Serial Angiographic Results. AJNR Am J Neuroradiol 24:257-262, 2003.

