

Surgical Challenges In Multiple Aneurysms

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INTRODUCTION

If a patient harbors multiple intracranial aneurysms none of them can be considered inoffensive. Many studies suggest that the risk of clipping all aneurysms simultaneously is less than the risk of a bleeding again from an untreated aneurysm. The purpose of this study is to review our experience with multiple cerebral aneurysms.

MATERIAL AND METHODS

This single center, single surgeon retrospective study is based on 101 patients with multiple aneurysms operated on by the main author between 01.01.1997-31.12.2017. The goal in all cases was single stage operation with all aneurysms clipping. We analysed the complication rate, mortality, state at discharge between groups with unilateral and bilateral aneurysms of the anterior circulation.

RESULTS

101 patients had together 257 aneurysms. There were no statistically significant differences between the 2 groups regarding the rate of complications or the outcome ($p > 0,05$). None of the rupture sites was correlated with an increased risk of developing complications. Aneurysms of the anterior communicating artery had the highest correlation/statistical significance ($p = 0,042$). 58% of patients were discharged with GOS of 4 and 5.

CONCLUSIONS

In experienced hands, unilateral fronto-pterional approach with clipping of all aneurysms in a single stage operation, is a feasible option for both unilateral and bilateral multiple cerebral aneurysms

KEY WORDS

multiple aneurysms, single stage operation, clipping