**INTRODUCTION**

Intraoperative rupture of intracranial aneurysms (IOR) is an unwanted but expected complication of aneurysm surgery. It could be a lethal complication if not managed promptly and properly. The incidence of IOR ranged from 5 – 40%. Detailed surgical planning, meticulous microdissection, proximal control and prediction of possible incident can avoid IOR of aneurysms.

**OBJECTIVE(S)**

The aim of this study deals the surgical strategies for intraoperative management of IOR and analyze the outcome of our personal series.

**METHOD(S)**

Prospectively collected retrospective study
Total no. of Patients: 340
Total no. of aneurysms: 397
Total no. of IOR of aneurysms: 45
Rate of IOR / patients: 45/340 = 13.2%
Rate of IOR / aneurysms: 45/397 = 11.3%

Study period: January 2007 to November 2016
Place: Department of Neurosurgery
National Academy of Medical Sciences (NAMS)
Bir Hospital, Kathmandu, Nepal

**RESULT(S)**

- **Occurrence of IOR**
  - Pre dissection: 11 (2.2%)
  - Dissection: 36 (80%)
  - Clip application: 8 (17.8%)
  - Total: 45 (100%)

- **Intensity of IOR**
  - Minor: 28 (62.3%)
  - Major: 17 (37.7%)
  - Total: 45 (100%)

- **Location of IOR aneurysms**
  - Location: 15 (31%)

- **Postoperative complications**
  - Non IOR Group: 31 (10.5%)
  - IOR Group: 22 (48.5%)

- **Size of Aneurysms**
  - Total no. of cases: 295
  - Total no. of complications: 45

- **Hunt & Hess clinical grade**
  - I: 11
  - II: 24
  - III: 10
  - IV: 0
  - V: 0

- **Miller Fischer Grade**
  - I: 3
  - II: 7
  - III: 14
  - IV: 0
  - V: 0

- **IOR in relation to location of aneurysms**
  - Anterior circulation: 31
  - Posterior circulation: 1

**SUCCESSFUL MANAGEMENT OF IOR OF ANEURYSM**

- Prediction of possible incident, use of operating microscope, ICG videography, sharp dissection and proper selection of clips are some of the crucial points to be considered seriously to avoid IOR.
- IOR does not significantly influence the mortality rate, however, increased morbidity leading severe disability may be expected.

**CONCLUSION(S)**

- Does intraoperative rupture of cerebral aneurysm influence the outcome of microsurgical clipping of aneurysms
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**REFERENCES**


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