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## C0428 - MICROSURGICAL ANEURYSM CLIP LIGATION LEARNING CURVE IN A LOW VOLUME CENTRE, FIRST 62 ANEURYSMS IN 6 YEARS. RESULTS AND INITIAL EXPERIENCE

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### Resumen

**Objectives:** Even though trends in management of cerebral aneurysms have changed with a clear preference for endovascular treatment rather than microsurgical treatment, there should still be a place for microsurgical clipping. Resident training in cerebrovascular surgery is becoming restricted so acquiring a microsurgical clipping experience in this environment is becoming difficult. A description of the author's training experience with these first 58 patients in a low volume case environment is detailed.

**Methods:** The first consecutive 62 cerebral aneurysms in 58 patients treated microsurgically between 2010 and 2016 were registered prospectively. Patients underwent diagnostic angiography and control angiography three months after the treatment. Presurgical condition was measured using the Hunt-Hess grade. Outcome was measured using the Glasgow Outcome Scale two months after surgery and 9 month follow-up. Surgical duration was recorded as well as temporary clipping time, intraoperative incidences and postoperative complications. Postoperative computer tomography scans were performed in all cases. The first 29 patients were compared with the second 29 patients.

**Results:** Mortality was 2 patients (3.4%) both being preoperatively Hunt-Hess 4 with ruptured aneurysms. Permanent morbidity was appreciated in 2 patients (3.4%) both being preoperatively Hunt-Hess 3 with ruptured aneurysms. Early outcome (2 months after surgery) was similar to late outcome (9 months after surgery). There were no notable differences in outcome between the first group and the second group.

**Conclusions:** Microsurgical training for aneurysm clipping requires commitment and skill. Mentorship steepens the learning curve and is highly recommended. Excellent results can be obtained in "standard" anterior circulation aneurysms by young trainees even in low volume cerebrovascular centers as long as they are proficient in microsurgical techniques. Microsurgical laboratory training is key for obtaining these good results from the beginning.