Background Recent data demonstrated that surgical clipping of the middle cerebral artery aneurysm may be superior to endovascular coiling when modified Rankin Scale (mRS) 2 or less is considered a good outcome. However, it is not clear that how many of the patients in both arms were able to go back to baseline functional states despite being independent. There are minimal data on the outcome of the repair of the MCA aneurysm when mRS 0–1 is considered a good outcome. Additionally, outcome of patients with a complex anatomy and/or wide neck are not well described.
Objectives Primary objective is to evaluate the functional outcomes of MCA aneurysm patients who underwent endovascular repair including those with wide neck and complex in nature. Secondary, objective is to determine the percentage of good outcome (mRS 0–2) patients who may return to the functional status (mRs 0–1).
Methods From a prospectively maintained database, consecutive patients with MCA aneurysm who underwent endovascular treatment were enrolled from 2011 to 2015. Patient's demographics including perioperative events were captured. In addition to the long-term angiographic results, the functions outcome was measured using mRS in 90 days and subsequent visits.
Results 13 patients with median age 60 years (38–76), 83% women underwent endovascular repair of the 14 MCA aneurysms. Off 14 aneurysms (right 9) including 2 ruptured cases (11 were wide neck and 6 had complex anatomy), 11 required stent-assisted coiling representing one ruptured case. Stent was deployed in all but one case due to the extreme tortuosity, which underwent primary coiling of aneurysm. This 67 years old patient with 14 mm symptomatic right MCA aneurysm required treatment prior to initiate chemo and radiation therapy for her breast carcinoma. She developed intraoperative thrombosis of superior division of MCA which was recanalised using 10 mg of intra-arterial eptifibatide resulted in no clinical symptoms or radiographic stroke. Immediate complete and near complete obliteration was observed in 10 and subtotal in 4 cases. One patient lost long term follow-up. Off 4 subtotal cases; two achieved complete and 2 remain subtotal with improvement. Recurrence of aneurysm was observed in two cases that required subsequent coiling and achieve long-term complete obliteration. 90 days Independent functional outcome (mRS 0–2) was observed in all 13 patients including 2 ruptured cases. Long-term normal functional state (mRS 0–1) was observed in 11/12 cases and one ruptured patient remained in mRS 2 and was not able to go back to work.
Conclusions Endovascular repair of the MCA aneurysm inclosing those with wide neck and complex are not only safe and feasible, but associated with high long-term functional outcome. Therefore, endovascular options must be offered to patients prior to surgical clipping of a MCA aneurysm. Further study may be warranted.
Disclosures Y. Lodi: None. **V. Reddy:** None.

E-068 AVAILABILITY OF TRANSCRANIAL MOTOR EVOKED POTENTIAL MONITORING IN THE ENDOVASCULAR TREATMENT OF ANTERIOR CHOROIDAL ARTERY ANEURYSMS

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10.1136/neurintsurg-2016-012589.140

Introduction In neurosurgical operation intraoperative monitoring is now a essential tool for treatment. Expecialy in craniotomy as in clipping and tumor resection. However in the endovascular treatment it is not so often the case. In our institute we used Transcranial motor evoked potential monitoring (TC-MEP) in endovascular treatment from 2014. We will show the effectiveness from our experience.
Methods We studied 15 patients (n = 16) with Anterior choroidal artery (Anch.A) aneurysms who underwent coiling between September 2014 and February 2016. All patients were fully anesthetized by total intravenous Anastasia (TIVA) and TC-MEP were checked after delivering every each coil. The stimulation strength was set at 120 mA. Electromyograms of the bilateral tibias anterior and abductor policies brevis muscle were obtained.
Results TC-MEP of all patients was recorded successfly. No deficits and no decrease in the voltage was seen in the end of the treatment but in 3 cases we experienced significant decrease during the treatment. In 2 cases of these, the decrease was seen just after we inserted the micro catheter into the aneurysm neck. In the other 1 case the decrease was seen when the coil loop prolapsed and covered the Ach.A inflow. Each cases recovered after repositioning. Interestingly the angiographical appearance of the Ach.A didn't change in any case.
Conclusion We were able to treat the Ach.A aneurysms with endovascular surgery using TC-MEP safely and no deficits were seen. There was no change in the angiographic appearance of the Ach.A but TC-MEP voltage decreased in 3 cases. It suspects that TC-MEP could predict the ischemic changes and contribute to the treatment in the endovascular surgery.
Disclosures S. Hataoka: None.

E-069 FLUOROSCOPY TIME AND RADIATION DOSE IN MECHANICAL THROMBECTOMY: A COMPARISON OF TECHNIQUES

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10.1136/neurintsurg-2016-012589.141

Introduction/purpose Interventional stroke management has seen a period of explosive growth in the wake of recent trials demonstrating improved outcomes in patients who undergo timely and appropriate procedural management. The two most common interventional techniques involve the use of stent retrieval devices and suction aspiration. In the setting of demonstrable clinical benefit to the patient in these procedures, further exploration of intraprocedural radiation exposure to the patient and operator is warranted. While radiation exposure for the patient in any one procedure is unlikely to produce a clinically-evident adverse event, chronic exposure to the operator may carry significant risk. Our goal is to determine the difference, if any, in fluoroscopy time (FT) and dose area product (DAP) for the use of these devices.
Materials and methods We examined data for interventional stroke management cases performed for M1 segment occlusions at Duke University Medical Center from the period of January 2014 to January 2016 with regards to fluoroscopy time and dose area product. Cases were subdivided into those only utilizing stent retrieval devices (Solitaire^{TM}; Covidien, Dublin, Ireland) and those only utilizing suction aspiration