concerns, observation is often favored. However, with a growing elderly population, many of whom are in good health, endovascular management of elective aneurysms could be considered. The aim of this study is to analyze clinical outcomes in patients older than 70 years with unruptured cerebral aneurysms treated electively.

Methodology All patients over 70 years of age who were treated electively for unruptured cerebral aneurysms between Jan 2017-Feb 2019 at Westchester Medical Center were included in the study. A retrospective chart review was performed. Demographics, presentation, aneurysm location, clinical complications, and modified Rankin score (mRS) at 30 days were noted. Good outcomes were defined as mRS<2 at 30-days or discharge to home and bad outcomes were defined as mRS>2 or rehab placement. To compare pre-existing comorbidities, the Charlson Comorbidity Index (CCI) was used.

Results A total of 22 patients were included with a mean age of 76.8 years (range 71–86 years). The male:female ratio was 1:6. 78% of the procedures involved flow diversion using the Pipeline Flex device; the remaining 22% involved coil embolization. There were no neurological complications in our series. Groin complications were seen in 2 patients. The mean CCI for the entire group was 6 and for those with complications was 7. Good outcomes were seen in 95.4% (21/22) of the patients included in this study.

Conclusion Contrary to popular assumption, good outcomes were seen in more than 95% of patients above 70 years of age who undergo elective treatment of unruptured cerebral aneurysms. The rate of neurological complications was 0% in our series. The 2 groin complications noted in this series may be associated with atherosclerotic vasculature and use of dual antiplatelet agents for flow diversion. Given the overall safety and the probability of good outcomes, these findings suggest that patients above 70 years with high-risk unruptured aneurysms should not be denied elective aneurysmal treatment.

Disclosures G. Kaur: None. J. Cooper: None. L. Melathe: None. F. Al-Mufti: None. C. Gandhi: None. J. Santarelli: None.

E-036 UNEXPECTED PROXIMAL STENT MIGRATION DURING THROUGH STENT TECHNIQUE FOR STENT ASSISTED COIL EMBOLIZATION (NEUROFORM ATLAS STENT)

Y Jung*, H Lee, J Kim, C Chang. *Neurovascular surgery/Neurointervention*, Daegu, Korea, republic of

10.1136/neurintsurg-2019-SNIS.111

Background and importance When attempting through the stent technique in the stent assisted coiling, there is a risk of the distal stent migration due to the microwire or microcatheter. However, we had never seen a case in which a stent slipped downward in the literature review. We report a case of proximal stent migration.

Clinical presentation A 79-year-old female patient was admitted with a wide neck aneurysm of the middle cerebral artery. The stent-assisted coil was designed to be saving the incorporated branch. With jailing technique, one microcatheter was placed in the sac, then the Neuroform Atlas stent was deployed, and another microcatheter was delivered with the

through the stent technique for double microcatheter technique. During the re-cross the stent the distal migration was observed. We try removal of the microwire and microcatheter. At the moment of pulling the microcatheter and microwire to remove, the existing stent was pulled downward. The patient had a cerebral infarction result in left side motor weakness, can walking with cane.

Discussion The patient was neurologically compromised by unexpected proximal stent migration. Distal stent migration may occur occasionally, but proximal migration is the first experience reported.

Conclusion Physician may remember that unexpected events may occur, and we think that more attention will be needed when doing something. Other reader may wish to remember that this can happen.

Disclosures Y. Jung: None. H. Lee: None. J. Kim: None. C. Chang: None.

E-037 DURABILITY OF TREATMENT FOR THE PENUMBRA SMART COIL SYSTEM AT ONE YEAR IN PATIENTS WITH RUPTURED ANEURYSMS: SUBSET ANALYSIS OF THE SMART REGISTRY

¹D Fiorella, ²B Bohnstedt, ³C Schirmer, ⁴R Bellon, ⁵R DeLeacy, ⁶R Starke, ⁷A Spiotta*. ¹Cerebrovascular Center, Stony Brook University Medical Center, Stony Brook, NY; ²Oklahoma University Medical Center, Oklahoma City, OK; ³Geisinger Medical Center, Danville, PA; ⁴Department of Interventional Neuro Radiology, Swedish Medical Center, Englewood, CO; ⁵The Mount Sinai Hospital, New York, NY; ⁶University of Miami Hospital, Miami, FL; ⁷Medical University of South Carolina, Charleston, SC

10.1136/neurintsurg-2019-SNIS.112

Introduction The Penumbra SMART COIL System includes a novel generation of embolic coils comprised of complex and WAVE shape properties with varying levels of softness to promote dense packing and durable long-term occlusion. We report a subset analysis to assess the durability of treatment with SMART COIL System at one year follow-up in patients with ruptured aneurysms enrolled in the SMART registry.

Materials and methods The SMART registry is a prospective, multi-center registry study. Procedures must employ ≥75% of the SMART, PC400, or POD coils to meet the registry criteria. SMART registry endpoints include retreatment rates through one year follow-up, procedural device-related serious adverse events (SAE), and the ability to achieve adequate occlusion at immediate post-procedure. Multivariate analysis was performed to identify predictors of outcomes at one year. **Results** Of the first 500 patients with one year follow-up, 24.2% (121/500) of patients had ruptured aneurysms (74.4% female; mean age 56.4 ± 12.7 years). Ruptured aneurysms were small (<11 mm) in 89.3% (108/121), large (11 to 25 mm) in 9.9% (12/121), and giant (> 25 mm) in 0.8% (1/121) of patients and 30.8% (37/120) were wide-neck (dome-to-neck ratio <1.5 or neck width ≥ 4 mm). Stent-assisted coiling and balloon-assisted coiling were performed in 8.3% (10/121) and 32.2% (39/121) of patients, respectively. Median packing density for ruptured aneurysms was 29.7% (IQR 21.0–40.4).

In patients with ruptured aneurysms, Raymond Class I and II was observed in 90.9% (110/121) at immediate post-procedure and 80.2% (89/111) at one year follow-up. The recanalization rate at one year was 23.4% (26/111). The retreatment