Abstract E-115 Table 1

Variable	Trans-Femoral (n=314)	Trans-Radial (n=612)	P-value
Total Cost, mean (SD)	12591.8 (19128)	12789.5 (18424)	.88
Catheters, median (range)	12.4 (12.4-1900)	55.2 (12.4-369)	**.03**
Closure devices, median (range)	87 (87-174)	20.2 (20.2-40.4)	**<.001**
Wires, median (Range)	43.9 (43.9-576.8)	43.9 (43.9-576.8)	.16
Sheaths, mean, (SD)	44.3 (11.3)	41.1 (3.1)	**<.001**
Groin Ultrasound, median (Range) Radial Ultrasound, median (Range)	1510 (1510-1510)	908(908-908)	-
Pelvic CT, median (Range)Brain MRI, median (Range)ICU Stay per night, median (Range)	2901 (2901-2901) 5249 (5249-5249) 8982 (8982-8982)		-
Anesthesia, mean (SD)	738.8 (717.5)	726.9 (616.9)	.79
Contrast, mean (SD)	298.7 (326.6)	280.9 (324.9)	.69
Cost of postop stay, median (IQR)	180 (135-225)	67.5 (45-90)	**<.001**

Bold font= statistical significance

Abstract E-115 Table 2

Patient	Access Route	Complication	Additional expenses	Individual Charges (USD)	Total Charge (USD)
1	TF	Pseudoaneurysm	US Thrombin/ injection	1510689 (x2)	2888
2	TF	Retroperitoneal hematoma	US CT Scan ICU stay/night	151029018982	13393
3	TF	Stroke (MRI)	MRI Scan ICU stay/night	52498982	14231
4	TR	Radial access site abscess	US CT Scan Antibiotics cost	15102901987	5398
5	TR	Vasospasm	IA Cardene injection	15.25	15.25
6	TR	Vasospasm	Cross-Over to TF	12591.8	12591.8

Summary of Individual Cost (in USD) of Complication Treatment. Abbreviations: US: ultrasound, CT: computed tomography, MRI: magnetic resonance imaging, IA: intra-arterial, ICU: intensive care unit.

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E-116 STENT-ASSISTED COIL EMBOLIZATION OF HILLTOP ANEURYSM IN MIDDLE CEREBRAL ARTERY

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Background M1 segment of middle cerebral artery (MCA) aneurysm is a relatively rare clinical condition. However, due to its complex geometry and deep location, microsurgical treatment is challenging. With the development of devices and techniques, the range of aneurysms that can be treated with endovascular treatment (EVT) continues to expand. We performed this study to define a specific form of M1 aneurysm that can be safely and effectively treated through EVT as M1 hilltop aneurysm, and to report our treatment results.

Methods Of 757 MCA aneurysm between December 2017 and October 2021, 54 M1 segment aneurysms were treated with EVT, and these aneurysms were designated M1 hilltop aneurysms. Clinical and radiographic data, including aneurysm characteristics, endovascular techniques, angiographic outcome, procedure-related complications and clinical outcomes at the time of the last follow-up, were collected and reviewed retrospectively.

Results Treatments were successful in all 54 cases, 21 cases were treated with coiling and 33 cases with stent-assist coiling (SAC). The mean height of the aneurysm was 4.35 ± 1.9 mm, the mean width was 4.59 ± 1.9 mm, and the mean neck size was 3.63 ± 1.4 mm. Of the 54 cases, 50 (92.6%) cases were identified as wide-neck aneurysms. The neck of aneurysm incorporating branch vessel was found in 49 (90.7%) cases. Immediate post-procedural angiogram showed favorable occlusion in 32 (59.3%), incomplete occlusion in 22 (40.7%). There were 4 (7.4%) procedures-related complications including thromboembolism and internal carotid artery dissection, but there were no cases of permanent neurological impairment. The mean follow-up duration was 18.2 months. During the follow-up period, there was no neurological deterioration or aneurysmal rupture in any of the patients. On 50 available follow-up angiographic studies, minor recurrence was found in 6 (12%) cases and major recurrence was found in 1 (2%) case. Recurrence was significantly related to aneurysm neck (OR 3.9, 95% CI 1.2 to 12.9, p = 0.025).

Conclusions EVT for M1 hilltop aneurysms appears to be safe and efficacious, with low mid-term recurrence rate. However, long-term and large cohort study will be needed.

Disclosures S. Park: None. **W. Lee:** None. **J. Jung:** None.

E-117 MECHANICAL THROMBECTOMY FOR TREATMENT OF ACUTE ISCHEMIC STROKE IN FRAIL PATIENTS: A SYSTEMATIC REVIEW OF LITERATURE

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Background Frailty is a complex syndrome, referring to a state of increased vulnerability from age-associated decline that has been quantified by various validated scales. While frailty has been associated with an increased risk of adverse outcomes and reduced tolerance to open neurosurgical interventions, the overall safety and efficacy of mechanical thrombectomy (MT) for acute ischemic stroke (AIS) in frail patients is not well delineated. This systematic review aims to summarize and compare outcomes in frail and non-frail patients who underwent MT for AIS.

Methods A systematic review of literature was performed using Pubmed, Ovid Medline, and Web of Science. Studies with outcomes-related data patients with MT-treated AIS and with pre-stroke validated frailty score (ie. Clinical Frailty Scale, Hospital Frailty Risk Score, or Frailty Index) were included. Baseline patient and AIS characteristics, recanalization rate, procedural complications, and clinical outcome at 90-day follow-up for frail and non-frail patients were collected.

Results In the four included studies, there were 642 frail patients and 499 not frail patients. Frail patients had higher NIHSS on admission [16.3(2.5) versus 15.7(0.6), t=5.16, p<0.01] and were more likely to present with anterior circulation occlusions [97% versus 88%, X^2=42, p<0.01] compared to their non-frail counterparts. Frail patients experienced reduced rates of successful recanalization [72% versus 80%; X^2=4.6, p=0.03], reduced rates of good functional outcomes [29% versus 42%; X^2=22, p<0.01], and increased 90-day mortality [51% versus 25%; X^2=38, p<0.01] compared to non-frail patients.
Conclusion MT for treatment of AIS in frail patients is associated with worse rates of morbidity and mortality along with reduced efficacy. More studies are needed to further evaluate and identify characteristics that may be more favorable to endovascular management in these patients.
Disclosures N. Dabhi: None. **J. Kumar:** None. **R. Kellogg:** None. **M. Park:** None.

E-118 THROMBOEMBOLIC EVENTS DURING ENDOVASCULAR COILING FOR UNRUPTURED INTRACRANIAL ANEURYSMS: CLINICAL SIGNIFICANCE OF PLATELET REACTIVITY UNIT AND ADJUNCTIVE CILOSTAZOL

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Objective This study aimed to reveal the clinical significance of the platelet reactivity unit (PRU) and the efficacy of adjunctive cilostazol and its association with thromboembolic and microembolic events after coil embolization for unruptured intracranial aneurysms (UIAs).
Methods We retrospectively analyzed the data of 427 patients with UIAs who underwent endovascular treatment between July 2011 and June 2014. When clopidogrel resistance was confirmed via PRU assay after dual antiplatelet medication (aspirin plus clopidogrel) administration for 5 days, triple antiplatelet therapy with cilostazol was administered (Group I, 274 patients). The other group was placed on standard dual antiplatelet therapy (Group II, 153 patients). All patients underwent magnetic resonance diffusion-weighted imaging within 2 days after endovascular coiling.
Results No significant associations with the occurrence of thromboembolic and microembolic events were found between the groups. The occurrence of thromboembolic and microembolic events showed no statistical difference between groups I and II (p = 0.725 for thromboembolic events and p = 0.109 for microembolic events). Also, the PRU value and the occurrence of microembolic events, using a PRU cutoff value of 240, showed no statistical difference (p = 0.114 in group I and 0.064 in group II). There was significant increase in microembolic events after the use of a stent-assisted endovascular procedure. As the PRU value increased, there was a trend toward an increase in the mean number of microembolic lesions without statistical significance.
Conclusion Even though there is a presumed anti-thromboembolic effect for clopidogrel resistance in other literature, the clinical efficacy of adjustment of additional cilostazol for endovascular coiling of unruptured aneurysms may be limited due to the unspecified cutoff value of the PRU assay for evaluating the resistance.
Disclosures J. Ahn: None. **J. Park:** None.

E-119 A META-ANALYSIS OF THROMBECTOMY FOR LARGE VESSEL OCCLUSION BEYOND 24-HOURS

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Background The efficacy of thrombectomy for LVO presenting within 24 hours from LKW has been supported by multiple RCTs. Recent RCTs on thrombectomy in setting of large core infarcts demonstrate improved functional outcomes compared to medical management alone. However, these trials are restricted to patients presenting within 24 hours of LKW. The role of thrombectomy for LVO beyond 24 hours from LKW is unclear.
Methods A PRISMA guided systematic literature review of the MEDLINE and Cochrane databases was completed to identify all studies detailing the use of thrombectomy for AIS beyond 24hrs from last known well. Data on outcome measures were collected and included: rates of 90 day mRS score of 0-2, rates of symptomatic intracranial hemorrhage (sICH), 90 day mortality, and successful recanalization defined as mTICI 2b-3. Subsequent quantitative synthesis was performed with generation of pooled, weighted proportions using a random effects model.
Results In total 9 studies were identified with 563 patients undergoing MT for AIS beyond 24hrs. Successful recanalization defined as mTICI 2b-3 was achieved in 83% of cases (95% CI: 78.2 to 87.3%; I^2 = 33%). In 7.0% of cases, periprocedural sICH occurred (95% CI: 4.7% to 9.6%; I^2 = 0%). Furthermore, functional independence defined as an mRS 0-2 was achieved in 36.8% of patients (95% CI: 23.8 to 50.6%; I^2 = 85%). Lastly, 90 day mortality was observed in 26.1% of patients (95% CI: 22 to 30.5%; I^2 = 0.1%).
Conclusion Thrombectomy for LVO presenting beyond 24 hours from LKW can be effective and performed safely in carefully selected patients. Further prospective studies are needed to confirm our findings.
Disclosures G. Kohli: None. **D. Schartz:** None. **N. Ellens:** None. **T. Bhalla:** None. **T. Mattingly:** None. **M. Bender:** None.

E-120 THE UTILITY OF MRI AND MRA IN THE FOLLOW-UP EVALUATION OF TREATED DURAL ARTERIOVENOUS FISTULAS: A PRELIMINARY ANALYSIS

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Introduction Dural arteriovenous fistulas (dAVF) are relatively rare arteriovenous shunting lesions without intervening nidus.[1] [2] Risk stratification and associated natural history are characterized by the location and nature of venous drainage.[3] [4] Symptoms are related to the location of the recipient vein, such in patients with pulsatile tinnitus