were retrospectively evaluated. Information on demographic, indications, procedure type, complications, and success rate, defined as the ability to finish the procedure without switching to a different access site or catheter, were reviewed.

**Results** 237 Patients underwent 253 neurointerventional procedures. Right radial artery was used in most cases (98.4%); classic TRA was slightly more frequent than distal (57.3% vs. 42.7%). The most common procedure was stent-assisted coiling (24.5%), followed by simple coiling (17.4%), mechanical thrombectomy (15.4%), and arterio-venous malformation embolization (13.4%). The success rate was 97.2%, with 5 patients requiring conversion to femoral access, and 2 patients requiring additional femoral access. There were 3 access site complications: 1 forearm hematoma and 2 radial artery spasms. There were also 2 other procedural complications: 1 small ischemic infarct and 1 intracerebral hemorrhage.

**Conclusion** RIST Radial Access System is an effective tool for various neurointerventions. With a low conversion rate, it provides safer access than the femoral approach. Soon, like in cardiology, TRA, especially with RIST catheter, may become the standard of care in interventional neurosurgery.

**Disclosure of Interest** Nothing to disclose

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**P114/135**

**DRUG-COATED BALLOONS FOR TREATMENT OF IN-STENT RESTENOSIS FOLLOWING CAROTID ARTERY STENTING: A MAJOR CASE, SINGLE CENTER STUDY**


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**Introduction** Endovascular and surgical treatment of stenosis of the internal carotid artery (ICA) inherit a certain risk of restenosis due to endothelial hyperplasia. Drug-coated balloons (DCBs) are designed to reduce neointimal hyperplasia by transferring growth-inhibiting drugs to the endothelium, but they are rarely used in the neurovascular setting.

**Aim of Study** Assess the effectiveness of DCB and determine the frequency of recurrent ISRS, and factors that may influence its occurrence.

**Methods** In our center between 2010 and 2023, 109 patients received DCB treatment for in-stent restenosis of ICA. Their medical history, periprocedural, and follow-up data were analyzed. All patients received periodical follow-up through digital subtraction angiography, ultrasound examinations and tomographic imaging.

**Results** ISRS was diagnosed in the mean follow-up time of 18.7 months (1–180 months) following carotid artery stenting. In-hospital major stroke complication occurred in 1 patient (0.9%). No minor stroke or TIA occurred, yet, in 23 patients (21.1%) clinically apparent DWI-lesions were detected in postprocedural MRI. 17 patients (15.6%) had recurrent ISRS after DCB treatment in the mean follow-up period of 30 months (7–85 months). Diabetes mellitus and tobacco use were common risk factors for recurrent ISRS. The DCB treatment with Sequent® Please NEO resulted in a lower incidence of recurrent ISRS and a longer time-to-restenosis.

**Conclusion** In our practice, DCB offers a straightforward option to treat restenosis of the ACI ostium. The low rate of periprocedural complications and the median time of freedom from symptoms and/or restenosis suggest that DCB angioplasty for ISRS is a viable treatment.

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**Disclosure of Interest** Nothing to disclose

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**P116/177**

**MECHANICAL THROMBECTOMY WITH A NEW INTERMEDIATE BALLOON CATHETER COMBINING THE BGC AND DAC FEATURES: INITIAL CLINICAL EXPERIENCE WITH THE INEDIT DEVICE**

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**Introduction** The iNedit Balloon Distal Access Catheter is a new type of thrombectomy device featuring a balloon catheter positioned 3cm from the tip, allowing for intracranial flow restriction while also enabling combined therapy with stent-retrievers and distal aspiration.

**Aim of Study** We investigate the appraisal of the use, safety, and efficacy of the iNedit catheter in vivo.

**Methods** In a multicentric study, prospective data was collected on 22 patients treated with the iNedit catheter to perform thrombectomy for acute ischemic stroke due to large vessel occlusion.

The outcome measures consisted of several evaluations of user experience rated on a 5-point scale ranging from 1(bad) to 3(excellent), as well as assessments of procedural safety outcomes such as artery perforation and arterial occlusion, procedural efficacy outcomes including first pass effect and final recanalization, and clinical efficacy outcomes such as a 3-month 0–2 mRS.

**Results** The mean age was 72±12 years old; median NIHSS was 17 (11–19); occlusion were 12 M1-MCA, 7 M2-MCA and 3 other. Median score evaluation of the appraisal of use was 4-IQR [4–5]. First pass complete recanalization rate was 50% (75% FPE in proximal M2 location), and the final recanalization rate (TICI 2b-3) was 90.9% of patients. No artery perforation and arterial occlusion. Good functional outcome mRS 0–2 was achieved in 50% of patients.

**Conclusion** In this initial clinical experience, the iNedit device achieved a high rate of first-pass effect and final recanalization rate with no safety concerns, thus favoring a high percentage of good clinical outcomes.

**Disclosure of Interest** Alejandro Tomasello has received personal fees from Anaconda Biomed, Balt, Medtronic, Perflow, and Stryker
**Introduc**tion Idiopathic Normal Pressure Hydrocephalus (NPH) is a reversible form of dementia typically treated with ventriculo-peritoneal shunt surgery. Recently we have described the first percutaneous transfemoral transvenous deployment of an endovascular CSF shunt (eShunt® System; CereVasc, Inc., Auburndale, MA, USA) to treat communicating hydrocephalus.

**Aim of Study** We sought to evaluate the response of NPH to endovascular eShunt implant deployment in an initial multicenter clinical pilot trial using gait, bladder and cognitive outcome measures.

**Methods** Patients were included after demonstrating >20% gait improvement in lumbar drainage trial. Gait was assessed using Timed Up & Go (TUG) test, cognition using Montreal cognitive assessment (MoCA), and urinary incontinence using Neurogenic Bladder Symptom Score (NBSS). Results were normalized per-patient to pre-treatment scores. A composite outcome score (COS) incorporating TUG/MOCA/NBSS was computed.

**Results** Eleven patients (4 female; mean age 74.8±/-4.2 years) underwent successful eShunt placement. Follow-up data showed significant improvement in gait by 35.4% at 30-days (n=6, P<0.003), 24.8% at 90-days (n=6, p<0.03) and by 32.8% at 180-days (n=4, p<0.01) compared to baseline. MOCA and NBSS showed significant improvements at 30-days and the COS was significantly improved at all time points (p<0.005 at 30-, 90- and 180-days). No procedural/delayed hemorrhage or unexpected readmissions were encountered during this early follow-up phase.

**Conclusion** In elderly patients affected by NPH and its insidious effect on mobility, cognition and urinary continence, these results show that the endovascular eShunt implant can be safely deployed with a favorable risk profile and with rapid and sustained improvements in functional outcome scores.

**Disclosure of Interest** A. Malek and C. Heilman are co-founders, shareholders, investors and consultants.

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**P119/215 3D PRINTED SKULL MODEL WITH STONE POWDER – ENDOVASCULAR TRAINING WITH REALISTIC APPEARANCE IN DSA AND CT**

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**Introduction** 3D-printed vessels trees with intracranial aneurysms (IA) are regularly used for angiographic training of neuroradiologists in endovascular therapies. The anatomically correct orientation is often lost. The actual surrounding skull bone is missing, which in part decisively influences the X-ray visibility of the IAs.

**Aim of Study:** Create a 3D-printed skull model with a realistic appearance in DSA and CT with correct anatomical alignment.

**Methods** A skull model is printed from a computed tomography (CT) scan of a skull specimen. The passage of the ACI is modified to accommodate different vascular anatomies and aneurysms. We use a 50% gravimetric stone powder PLA filament with a density of 1.7 g/cm³. Comparable volume images are produced in CT and Angiography-Unit (AU). Representative two-dimensional radiographs are taken in the AU. All images are compared by the optical impression, dose applied and by the Hounsfield units (HU).

**Results** The overall imaging appearance and dose of the printed model is very similar to that of the real skull on X-ray (0.090 vs 0.091 dGy*cm*cm). On CT, the average HU value of the printed material is 241 compared to 293 for the specimen.

**Conclusion** We created a 3D printed skull model using a filament with a high content of stone powder. From an angiographic point of view, it is equivalent to a real skull. With minor adjustments to the skull anatomy and the addition of printed vessels, it is possible to create an anatomically correct model that appears realistic on imaging for training and validation purposes.

**Disclosure of Interest** Nothing to disclose.