infarction identified within 3 days from the onset of bleeding not related to aneurysm repair. Circulatory failure and severe intracranial hypertension prior to ECI, or within 3 days from bleeding if no ECI, were retrospectively determined. The association between ECI, prior circulatory failure, severe intracranial hypertension and patient outcomes was tested using uni- and multivariate analyses.

Results Seven-hundred-and-fifty-three patients with aSAH were included. ECI were observed in 40 patients with a prevalence of 5.3% (95% CI; 3.7–6.9%). New ECI lesions developed in-hospital in 70% of cases. Circulatory failure or severe intracranial hypertension was more common in patients with ECI compared to those without ECI (90% vs. 11% respectively $P<0.001$). In ECI patients, in-hospital occurrence of circulatory failure or severe intracranial hypertension was observed in 60% of cases, and was significantly associated new in-hospital ECI lesions (71% vs. 33% in patients without new in-hospital ECI lesions, $P=0.036$). ECI was independently associated with WFNS grade (OR=2.3, CI95%=1.5–3.6, $P<0.001$), circulatory failure (OR=4.7, CI95%=1.8–11, $P=0.001$), severe intracranial hypertension (OR=11.1, CI95%=3.8–32.3, $P<0.001$), mortality at 1-month (OR=6.3, CI95%=2.9–13.5, $P<0.001$), and poor outcome in survivors (modified Rankin score >3 at 6-month) (OR=3.8, CI95%=1.22–11.9, $P=0.021$).

Conclusions ECI following aSAH is associated with prior brain haemodynamic impairment occurring mainly in-hospital, representing a potential therapeutic target in poor-grade aSAH.

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Disclosure Nothing to disclose

EP06*

THE SUBARACHNOID HEMORRHAGE EARLY BRAIN EDEMA SCORE (SEBES) AS RADIOGRAPHIC MARKER OF CLINICALLY RELEVANT INTRACRANIAL HYPERTENSION AND UNFAVORABLE OUTCOME AFTER SUBARACHNOID HEMORRHAGE

¹M Said, ¹M Guemes, ¹A Herten, ¹TF Dinger, ¹M Chih, ¹M Darkwah Oppong, ²C Deuschl, ¹KH Wrede, ³C Kleinschnitz, ¹U Sure, ¹R Jabbarli. ¹Department of Neurosurgery and Spine Surgery; ²Department of Diagnostic and Interventional Radiology; ³Department of Neurology and Center for Translational and Behavioral Neurosciences, University Hospital of Essen, Essen, Germany

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Introduction The severity of early brain edema after aneurysm rupture was reported to be strongly associated with the risk of poor outcome after aneurysmal subarachnoid hemorrhage (SAH).

Objective/Aim Using the recently developed SEBES, we analyzed the predictors of early brain edema and its impact on the complications related to intracranial pressure (ICP) increase after SAH.

Methods All consecutive SAH cases treated between January 2003 and June 2016 with assessable SEBES were included

(n=745). Data on demographic characteristics, previous medical history, initial severity of SAH, need for conservative ICP treatment and decompressive craniectomy, occurrence of cerebral infarcts and unfavorable outcome at 6 months (mRS >2) were collected. Univariable and multivariable analyses were performed.

Results Younger age (<55 years, adjusted odds ratio [aOR] = 3.16, $p<0.0001$), female sex (aOR=1.64, $p=0.005$), poor initial clinical condition (WFNS=4–5, aOR= 1.74, $p=0.002$), presence of intracerebral hemorrhage (aOR=1.63, $p=0.011$), hypothyroidism (aOR=0.60, $p=0.043$) and renal comorbidity (aOR=0.29, $p=0.014$) were independently associated with the SEBES (scores 3–4). There was an independent association between the SEBES=3–4 and the need for conservative ICP treatment (aOR=2.43, $p<0.0001$), decompressive craniectomy (aOR=2.68, $p<0.0001$), development of cerebral infarcts (aOR=2.24, $p<0.0001$) and unfavorable outcome (aOR=1.48, $p=0.047$).

Conclusions The SEBES is a reliable predictor of ICP-related complications and poor outcome of SAH. Along with age- and sex-related predisposition to early brain edema, presence of certain comorbidities like hypothyroidism and renal diseases seem to play a protective role in the severity of early brain edema after SAH.

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Disclosure Nothing to disclose

EP07*

LONG-TERM RESULTS OF COMPLEX WIDE-NECKED INTRACRANIAL ANEURYSMS TREATED WITH STENT-ASSISTED COILING USING LOW-PROFILE ACANDIS ACCLINO STENT SYSTEMS

D Grieb, K Melber, F Boxberger, M Schlunz-Hendann, F Brassel. Department of Radiology and Neuroradiology, Sana Kliniken Duisburg, Duisburg, Germany

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Introduction Little data exists on endovascular treatment of complex intracranial aneurysms with the Acandis Acclino low-profile self-expanding closed-cell stent systems and is mainly limited to short- or midterm results.

Aims To report our long-term, single-center experience with the three generations of Acclino stents in the treatment of complex intracranial aneurysms.

Methods 64 aneurysms were treated electively using 91 Acclino stents. Single stent-assisted coiling was the preferred treatment in 40 cases and the kissing-Y stenting technique in 24 cases. We analyzed demographic data and long-term results.

Results All stents were successfully deployed with immediate complete or near complete occlusion achieved in 92.2%. Follow-up was available in 57 cases (89.1%) with a mean follow-up of 37 months (range 6–80 months). A complete or near complete long-term occlusion was achieved in 49 cases (86% RROC I/II). Eight residual aneurysms (14% RROC III) were