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 univariate 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 <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%=1.8–11.1,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.

**REFERENCES**


Disclose Nothing to disclose