1.2 HAEMORRHAGIC – Brain AVM/AVF, spinal vascular malformations

**Abstracts**

**DURAL ARTERIOVENOUS FISTULAS WITH COGNITIVE IMPAIRMENT: ANGIOGRAPHIC CHARACTERISTICS AND TREATMENT OUTCOMES**

**Aim of Study** To determine the utility of the endovascular CSF shunt (eShunt® System; CereVasc, Inc., Auburndale, MA, USA) in aSAH-induced hydrocephalus, we present initial single-center clinical experience with the eShunt implant in the post-aneurysmal hydrocephalus population.

**Methods** Patients having intractable elevated ICP with EVD placement and a favorable inferior petrosal sinus and bony anatomy were included. ICP was monitored before and after eShunt deployment for 36–48 hours. Primary endpoint was achieved if ICP remained <20 cmH2O enabling EVD removal. CT imaging of the brain was obtained immediately post-eShunt placement to evaluate eShunt placement and assess for any presence of new procedural hemorrhage.

**Results** Seven out of eight patients (5 female; age 64 +/- 12 years) underwent successful transfemoral transvenous eShunt procedure at 25.3 days (Range 14–38) post aSAH. Primary endpoint was achieved in all with EVD removal by 36 hours post eShunt deployment for 36–48 hours without procedural or delayed hemorrhage. Mean ICP rapidly decreased from 33.4 to 13 cmH2O at 1 hour (p<0.0001) and to 9 cmH2O (p<0.0001) at 36 hours post eShunt placement.

**Conclusion** These early encouraging results of the eShunt implant suggest clinical role and utility in the management of subarachnoid hemorrhage associated hydrocephalus possibly eschewing the need for VP shunt surgery and enabling minimally invasive CSF diversion in patients requiring dual antiplatelet or anticoagulant therapy.

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