



## O-VAS-14 - DESCOMPRESSIVE CRANIECTOMY IN PATIENTS WITH POOR-GRADE ANEURYSMAL SUBARACHNOID HEMORRHAGE

*B. Menéndez Osorio, R. Garcia-Armengol, C.J. Domínguez Alonso, A. Blanco Ibáñez de Opacua, C. Botella Campos, F.J. Goncalves Ramírez and J. Rimbau Muñoz*

*Hospital Universitari Germans Trias i Pujol, Barcelona.*

### Resumen

**Objectives:** Patients with poor-grade aneurysmal subarachnoid hemorrhage (aSAH) have poor outcomes because of the mass effect and brain stem compression. Furthermore, the decompressive craniectomy (DC) in patients with intracranial hypertension reduces morbidity and mortality. The aim of this study is to evaluate the outcome in poor-grade aSAH treated with DC.

**Material and methods:** We present 85 consecutive patients with aSAH admitted in our hospital between 2012-2014, 34 of them with poor-grade aSAH (Hunt-Hess (HH) IV-V, World Federation of Neurosurgical Societies (WFNS) IV-V), and 14 with DC. We viewed epidemiological, clinical and radiological factors.

**Results:** The most frequent location in the DC group was middle cerebral artery (50%) and in the other one was anterior communicating artery (25%). The 58% who received DC arrived with WFNS V vs the 45% without DC. 3 (20%) patients with DC died vs 6 (30%) without DC ( $p < 0.05$ ). The outcome (Glasgow Outcome Scale score, GOS) was available at 1 month, 3 months, 6 months, 12 months and 24 months. In the multivariate analysis, favorable outcome was associated with the location, dominance and admission status ( $p < 0.05$ ). It showed significant difference between DC and without DC at 3 months ( $p < 0.044$ ) but not at the last outcome (24 months). These results were unaffected by age, sex, Fisher, vasospasm and hydrocephalus ( $p > 0.05$ ).

**Conclusions:** We suggest that DC reduces the mortality in poor-grade aSAH ( $p < 0.05$ ). In our group, there was no significant difference in the outcome of each group, but the 50% (7) with DC achieved a good long-term outcome which is in relation with the WFNS and location.