

Aneurysmal SAH – Time To Treat, External Ventricular Drainage And Vasospasm

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Introduction:

Time to treat is an important factor to consider whilst treating patients with aneurysmal subarachnoid hemorrhage (aSAH), namely for its possible association with its complications. The present study aims to evaluate the relationship between time to treat and the development of complications, such as hydrocephalus and vasospasm.

Methods:

Retrospective cohort study was conducted, including all patients admitted at XXXX for aSAH in 2016, after the creation of a national referral system. Several variables, such as time to treat (TTT), treatment option, (endovascular vs surgical vs combined), presence of vasospasm and need for EVD were analyzed.

Results:

45 patients met the inclusion criteria, of which 27 were submitted to surgical treatment and 9 to endovascular treatment. The average time to treat (aTTT) was of 43.3 hours, with an average of 46.3 hours for the surgical group and 26.5 for the endovascular subgroup. 19 patients required EVD placement and 22 developed vasospasm. Initial transcranial doppler velocities showed a direct correlation with the maximum speed achieved ($p < 0.001$) and an inverse correlation with the first day of vasospasm ($p = 0.045$).

Conclusions:

The present study revealed that TTT doesn't seem to influence the need for EVD placement nor the development of vasospasm or peak velocities achieved during this period. There is also a possible correlation between the time to treat and the initial velocities measured in the endovascular subgroup.