To the Editor:

We have read with great interest the article “Outcome After Clipping and Coiling for Aneurysmal Subarachnoid Hemorrhage in Clinical Practice in Europe, USA, and Australia.”

We want to congratulate the authors on the importance of this research and the extent and consistent review of 7658 subarachnoid hemorrhages (SAH). Patients series studies have been performed including new trials and a growing database about the confrontation between coiling and clipping. The authors were precise when they discussed the real differences between clinical practice and the major trials series. The outcome may often not be extrapolated to actual practice due to external validation. In fact, the growth of endovascular centers worldwide does not correspond with a similar extension of experience and effectiveness, which leads us to a considerable variation of outcomes.

The wide multicentric patient selection and the organization of outcomes (in 14-d mortality, 90-d mortality, and outcome after the 90-d) were very elusive. Although, as the authors mentioned, the primary initial problem was the absence of the documented clinical presentation at admission, an almost essential issue, especially in patients with SAH, because it is critical to know where the patient’s clinical condition started before trying to evaluate where it may end. This may provide significant bias, especially in 14-d mortality, because you cannot exclude a patient’s previous condition when comparing treatment methods, and only with a random allocation of patients, it may provide higher evidence; however, this cannot be done in retrospective studies. Besides, the World Federation of Neurological Surgeons’s (WFNS) scale alone may not be the ideal indicator, and when thinking on prognostic factors, the modified Fisher scale (mFS) and Hunt and Hess scale (HHS) may be an option to be added.

A general suggestion would be the stratification of patients (HH 1–3, mFS 1–3 and WFNS 1–3), as a measure to reduce the impact of neurological complications of SAH over mortality, as well long-term follow-ups for both treatment groups, to evaluate complementary treatments, and the comparison of anterior circulation aneurysms against posterior circulation aneurysms.

It is clear that in emerging countries, the overall mortality rates are a bit higher than those presented and the actual learning-curve and range of coiling techniques are a more initial. Thus, studies with a more practical approach like this one are ideal to point our in-development Public Healthcare System in the right direction.

Two recent papers support the same idea; surgical clipping was chosen more frequently for non-ISAT aneurysms than for ISAT aneurysms, as published by Darsaut et al. Patients with such aneurysms might be candidates for inclusion in other randomized trials. In Anderson et al, there is a statistically positive association for microsurgical treatment, and they postulate that the number of microsurgical cases performed may be a surrogate indicator of closer neurosurgical involvement in the overall management of neurovascular patients and optimal case selection.

The idea of coiling replacing clipping may be unachievable into the long run, as we can see in the higher mortality for the first 14 d after coiling. Centers management protocols for aneurysmal SAH are not universal, and surgery continues to be the readiest and widespread treatment modality in the world.

Disclosure

The authors have no personal, financial, or institutional interest in any of the drugs, materials, or devices described in this article.

References


Bruno Braga Sissando da Costa, MD
Nicollas Nunes Rabelo, MD @
Manoel Jacobsen Teixeira, MD, PhD
Eberval Gadelha Figueiredo, MD, PhD
University of Sao Paulo
Sao Paulo, Brazil