

Embolic strokes of undetermined source: frequency and patient features in a hospital-based population.

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BACKGROUND AND AIMS

Cryptogenic strokes (CS) comprise from 10 to 40% of ischemic strokes [1]. Most of these are embolic in origin, arising from proximal arterial sources, the heart, or venous sources and an extensive diagnostic work up is needed to find out these hidden origins. For this reason, in 2014 the new construct of Embolic Stroke of Undetermined Source (ESUS) was created [2] in order to distinguish, among the cryptogenic events, those who might be embolic and might be treated differently from the other ones. Our aim was to evaluate the percentage of ESUS in a hospital-based cohort.

METHODS

A retrospective analysis was performed on consecutive patients admitted at the Neurology Department of our University Hospital, considering the period from January 2010 to December 2015. We included patient with a diagnosis of stroke and, among them, we take into account the ischemic ones. All patients were evaluated at baseline (2010-2015) and at follow-up (2017) with both a telephonic interview and an outpatient visit.

RESULTS

In a period of 6 years, 907 patients were admitted in our ward with an acute cerebrovascular event. 756 had ischemic stroke and 151 intracranial cerebral hemorrhage. Among those with stroke, 52 (6,8%) died within the first 15 days due to critical conditions. Of these 756 patients with recent ischemic stroke, 178 (23%) met ESUS criteria, and an additional 293 (38%) patients had incomplete evaluation required for ESUS diagnosis. The mean age of ESUS patients (69,01; SD:13.2) was lower than the 578 non-ESUS ischemic stroke patients (72,3 SD 13,6). Among ESUS patients, hypertension, diabetes, and prior stroke were present in 73%, 34%, and 8%, respectively. Median NIHSS score was 7 (SD: 4.73). At discharge, more than 93% of ESUS patients received antiplatelet therapy.









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DISCUSSION AND CONCLUSION

This sample of patients with recent ischemic stroke shows that nearly one-quarter of patients met criteria for ESUS, with additional ESUS patients likely among those with incomplete diagnostic investigation. ESUS frequency in the present study appears to be similar to previous reports in other geographical areas and with different Health System. ESUS patients were relatively young with mild strokes. Antiplatelet therapy was the standard antithrombotic therapy for secondary stroke prevention

REFERENCES

