Letter by Mahagne et al Regarding Article, “Embollic Strokes of Undetermined Source in the Athens Stroke Registry: A Descriptive Analysis”

To the Editor:

We read with great care and interest the article entitled “Embollic Stroke of Undetermined Source in the Athens Stroke Registry” by Ntaios et al1 published in the January issue. The authors proposed the first description of patients with embolic stroke of undetermined source (ESUS) in a large retrospective stroke registry population (Athens Stroke registry). The Cryptogenic Stroke/ESUS International Working Group recently introduced this new clinical construct, defined as a radiologically confirmed nonlacunar brain infarct in the absence of extra or intracranial symptomatic atherosclerosis arterial stenosis (≥50%), major-risk cardioembolic source, and any other specific cause of stroke.2

Ntaios et al1 draw from their study the following conclusions: (1) 275 of 2735 patients (=10%) are classified as ESUS; (2) the rate of stroke recurrence at 1 year in this group is =11.3%; (3) a covert paroxysmal atrial fibrillation (AF) is frequent in this ESUS group (29.1% in AF documented in the follow-up, and 42.9% if the authors considered strong suspicion of AF based on clinico-radiological data). However, it should be noted that only 51.6% of patients classified as ESUS underwent 24-hour Holter Monitoring (11.2% of all patients included in the study). Indeed, Hart et al2 recently listed the diagnostic assessment for ESUS classification. A minimum of 24-hour Holter monitoring with automated rhythm detection is required to exclude paroxysmal AF. The cardiac telemetry is considered as not sufficient. Consequently, it is not possible to classify patients in ESUS group, if these minimal cardiac investigations are not performed.

In addition to this remark, we would like to point out that in ESUS screening, the choice of additional AF detection method is left to each clinician. This methodology may lead to include in ESUS group different patient profiles. To illustrate this issue, we would like to share our (unpublished) results. ESUS criteria have been applied to the patients included in the Nice Stroke registry (Target-AF III). One thousand seventy-four patients with stroke underwent prolonged Holter ECG from admission until discharge with a minimum of 3 days (median [interquartile range]: 6.56 [3.94–11.18] days).

If we base our classification on the first 24-hour ECG Holter results, 301 (28.02%) patients are classified in ESUS group and 20.93% AF are found in the follow-up. If we consider now the result of prolonged ECG Holter, 243 (22.62%) patients are considered as ESUS and only 2.06% covert AF are found in follow-up (median [interquartile range] follow-up: 2.40 [1.70–3.21] years). In this last ESUS group, the ischemic recurrent rate is only of 1.23%.

In other words, more we search, more we find AF, and less we classify patients as ESUS. In our study, 58 AF have been missed by 24-hour Holter ECG. These results are consistent with other published data and are not surprising because prolonged Holter has been demonstrated more efficient than 24-hour Holter ECG.3 This point is of particular concern because large randomized trials studying, in ESUS, efficacy and safety of new oral anticoagulants compared with antiplatelet agents, will start soon.4,5 In the absence of prolonged Holter monitoring, patients with occult AF might be randomized and treated with aspirin. If clinicians do not want to take the risk to randomized in antiplatelet arm, some patients with occult AF, it is necessary to track AF carefully before randomization. This point is worth to be raised. Finally, it should be noted that, in our experience, the recurrence rate under aspirin is low, and even if we assume that anticoagulants are more effective than aspirin, the absolute risk reduction that we expect will be modest.

Disclosures

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Marie-Hélène Mahagne, MD, PhD
Sylvain Lachaud, MD
Laurent Suissa, MD
Stroke Unit
University Hospital of Nice
Nice, France

References


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Marie-Hélène Mahagne, Sylvain Lachaud and Laurent Suissa

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