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Reply: Can Silent Brain Lesions Be a Target to Guide Anticoagulation Treatment in Patients With Low-Risk Atrial Fibrillation to Reduce Cognitive Impairment?

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Response to "Can be Silent Brain Lesions a Target to Guide Anticoagulation Treatment in

Patients with Low-Risk Atrial Fibrillation to Reduce Cognitive Impairment?" by Ammirati et

al.

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As raised by Ammirati et al. (1) the recent evidence (2) that prevalence of silent cerebral ischemia

(SCI) in patients with paroxysmal and persistent atrial fibrillation (AF) and controls in sinus rhythm

implies several clinically relevant issues.

The finding that approximately half of controls presented at least an area of SCI is strongly

hypothesis generating. On the other side the prevalence of other cardio-embolic sources, as patent

foramen ovale or nonstenotic carotid plaques material, should not be differently stratified within

cases and controls, therefore not biasing main study results.

Indeed the question whether SCI represent a target for oral anticoagulation (OAC) to prevent

cognitive impairment is crucial. In fact, risk stratification, to date, relies on clinical scores

(CHA2DS2-VASc score) based on symptomatic cerebral events only and, anyway, fallacious.

The occurrence of cerebrovascular events in AF patients, despite low risk score remains

unfortunately not unusual (3) warranting introduction of "new" markers, as left atrial appendage

morphology (4,5) and specific echocardiographic parameters (6). Limited literature has assessed

whether antiaggregants/OAC may prevent/reduce SCI. One small study (7) suggested that aspirin

attenuates SCI incidence in AF patients, preventing events also in early stages of AF-related

cerebral damage and, consequently, cognitive decline. However, this option is not recommended

due to the detrimental effects of antiaggregants with bleeding (8). We fully agree with Ammirati et al that further prospective randomized trials are needed to evaluate the possible reduction of SCI by OAC. In the meantime aggressive rhythm control strategy is mandatory to prevent clinical and silent cerebral ischemia by sinus rhythm restoration and maintenance.

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