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ABSTRACT N. CO23

LABORATORIO E FATTORI PREDITTIVI

MARKERS OF INFLAMMATION AND HYPOFIBRINOLYSIS ARE ASSOCIATED WITH COGNITIVE DYSFUNCTION AND MOTOR PERFORMANCES IN ATRIAL FIBRILLATION PATIENTS ON ORAL ANTICOAGULANT THERAPY: INSIGHTS FROM THE STRAT-AF STUDY.

F. Alfano[1|2], F. Cesari[1|2], A.M. Gori[1|2], M. Berteotti[1|2], E. Salvadori[3], B. Giusti[1|2], A. Bertelli[1|2], F. Fratini[4], A. Rogolino[1|2], B. Formelli[4|5], F. Pescini[4|5], E. Fainardi[6], E. Barucci[4], G. Salti[5], A. Cavaliere[4], A. Ginestroni[6], A. Poggesi[4|5], R. Marcucci[1|2].

1. Department of Experimental and Clinical Medicine, University of Firenze, Firenze; [2]Center for Atherothrombotic Diseases, Careggi University Hospital, Firenze; [3]Department of Biomedical and Clinical Sciences, University of Milan, Milan; [4]NEUROFARBA Department, Neuroscience Section, University of Firenze, Firenze; [5]Stroke Unit, Careggi University Hospital, Firenze; [6]Neuroradiology Unit, Careggi University Hospital, Department of Experimental and Clinical Biomedical Sciences, University of Firenze, Firenze.

Background Atrial fibrillation (AF) is the most common supraventricular arrythmia and one of the most commonly encountered heart conditions in clinical practice. Emerging evidence suggests a significant role of inflammation in the pathogenesis of AF. Population studies have also suggested an association between AF and cognitive impairment and dementia. The aim of this study is therefore to assess, in a population of AF patients on oral anticoagulant therapy, the association between circulating biomarkers involved in the pathogenesis of AF and the cognitive and motor performances of the enrolled patients. **Methods** The Strat-AF study is an observational, prospective, single-center, hospital-based study enrolling elderly patients with AF. Results refer to 180 subjects who underwent a complete clinical, biohumoral, cognitive, and functional evaluation. **Results** At multivariate logistic regression, Clot Lysis Time (CLT) and circulating levels of von Willebrand Factor (vWF) remained significantly associated with pathological performances at the Stroop test (expressed as execution time) [OR 95% CI 1.54 (1.02–2.35), p = 0.042 and 1.75 (1.08–2.82), p = 0.023, respectively]. With regard to the Short Physical Performance Battery (SPPB), the circulating levels of IL-8 remained significantly associated with the clinical endpoint [OR 95% CI 2.19 (1.13–4.25), p = 0.020]. **Conclusions** Our results suggest a potential innovative tool able to identify AF patients at risk of worse prognosis in terms of cognitive and motor performances. The clinical relevance of these results is due to the fact that we have no efficient methods to predict a deterioration in the cognitive performance and, consequently, the possible onset of dementia in AF patients undergoing oral anticoagulant therapy.

Email: *francesco.alfano@unifi.it*

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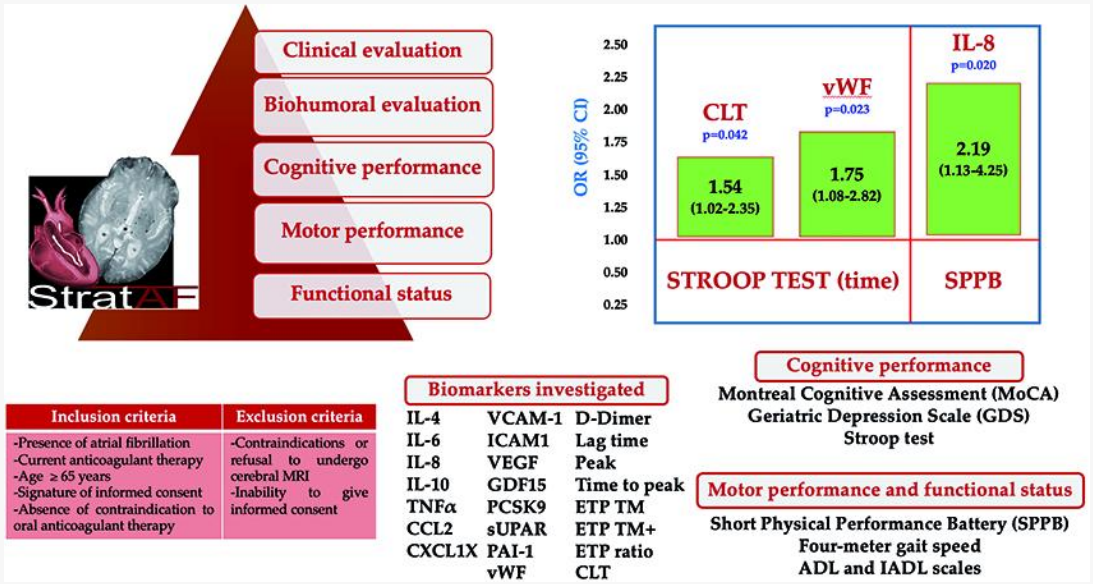

Inclusion criteria	Exclusion criteria
-Presence of atrial fibrillation -Current anticoagulant therapy -Age ≥ 65 years -Signature of informed consent -Absence of contraindication to oral anticoagulant therapy	-Contraindications or refusal to undergo cerebral MRI -Inability to give informed consent

Biomarkers investigated

IL-4	VCAM-1	D-Dimer
IL-6	ICAM1	Lag time
IL-8	VEGF	Peak
IL-10	GDF15	Time to peak
TNFα	PCSK9	ETP TM
CCL2	sUPAR	ETP TM+
CXCL1X	PAI-1	ETP ratio
	vWF	CLT

Cognitive performance

Montreal Cognitive Assessment (MoCA)
Geriatric Depression Scale (GDS)
Stroop test

Motor performance and functional status

Short Physical Performance Battery (SPPB)
Four-meter gait speed
ADL and IADL scales