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Commentary

Appropriateness of antithrombotic prophylaxis in the oldest old with non-valvular atrial fibrillation: ARAPACIS and REPOSI

Pier Mannuccio Mannucci[a,*], Alessandro Nobili[b]

[a] A. Bianchi Bonomi Hemophilia and Thrombosis Center, IRCCS Ca' Granda Maggiore Policlinico Hospital Foundation, Milan, Italy
[b] Department of Neuroscience, IRCCS — Istituto di Ricerche Farmacologiche "Mario Negri", Milan, Italy

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In the frame of the Atrial Fibrillation Registry for Ankle–Brachial Index Prevalence Assessment-Collaborative Italian Study (ARAPACIS) involving 93 Internal Medicine wards, Pignatelli et al. [1] conducted a questionnaire survey that, in addition to other questions, asked on the drugs of choice for prophylaxis of cardioembolism in patients with non-valvular atrial fibrillation (AF). Aspirin was chosen by 9% of the respondents, whereas oral anticoagulants were chosen by as many as 91% of the responders, 55% preferring vitamin K antagonists (VKAs) and 36% the non-vitamin K oral anticoagulants (NOACs) (of which dabigatran, rivaroxaban and apixaban are licensed in Italy).

Unfortunately, we suspect that these indicators of excellent prescription appropriateness do not correspond to what happens in real-life in Italian internal medicine wards. REPOSI is a prospective and independent registry sponsored by the Italian Society of Internal Medicine, that starting in 2008 collects data on drug prescription in people older than 65 years acutely admitted to 90 Italian hospital wards of internal medicine [2]. One of the main purposes of the registry, that until now has data on 5386 cases (mean age 79 ± 7 years), is to evaluate the appropriateness of drug prescription in multimorbid elderly people, comparing medications recorded at the time of hospital admission (reflecting the prescription of family doctors as well as patient adherence) with those at discharge (reflecting the expert prescription of hospital internists and geriatricians). As it could be expected from the general features of these elderly patients, chronic AF was one of the most frequent diagnoses. In the first run of the registry conducted in 2008, the appropriateness of antithrombotic prophylaxis in AF was very poor [3]. At hospital admission, as many as 26% of the patients with this diagnosis received no antithrombotic prophylaxis, 31% were treated with antiplatelet drugs (mainly aspirin) and 34% with VKAs, the only oral anticoagulants licensed in Italy at that time. The pattern of prescription hardly changed at the time of hospital discharge: 33% no prophylaxis, 31% antiplatelet agents and 34% VKA [3]. These data on the poor appropriateness of anticoagulant prophylaxis in AF confirmed the data obtained earlier by Ferro et al. [4] in a single internal medicine ward in Italy.

Hoping that this gloomy situation had improved, we re-examined the data obtained in the frame of REPOSI six years later in 2014, at a time when NOACs had been licensed in Italy, albeit with a delay of approximately two years in comparison with other countries. Unfortunately, the picture of poor appropriateness has not changed: at hospital discharge, 66% of patients were prescribed aspirin or other antiplatelet agents for thromboprophylaxis, 29% VKA and as few as 4% of them the three NOACs lumped together (unpublished data).

Why there is such a dramatic difference between what the Italian internists declare in the frame of a questionnaire survey and what happens in terms of their real-life hospital prescriptions? It is unlikely that those who responded to the ARAPACIS survey were different from those who regularly contribute to the REPOSI registry. The most likely reasons are those ascertained by us in the frame of REPOSI: beyond their good intentions, internists challenged with the issue of thromboprophylaxis in elderly people with AF prefer to avoid the risk of bleeding associated with anticoagulant therapy [3,5]. This occurs in spite of the fact that our analysis of the scores used to establish the degree of thrombotic and bleeding risks demonstrated that patients had in average a higher score for thromboembolic than bleeding risk [5]. This concern is apparently not mitigated by the introduction of NOACs that, being at least as effective as VKA for thromboprophylaxis, have a 50% lower risk of the most feared complication of VKA therapy, i.e., intracranial bleeding [6]. Internists still prefer to prescribe aspirin, in spite of the fact that this antiplatelet drug is not only ineffective for stroke prevention in the oldest old, but also associated with a non-trivial risk of bleeding [6,7].

* Corresponding author at: Via Pace 9 - 20122 Milano. Tel. +39 02 55038377; fax +39 02 50320723.
E-mail address: piermannuccio.mannucci@policlinico.mi.it (P.M. Mannucci).

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Conflict of interests

The authors state that they have no conflicts of interest.

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