effects. Likewise, other biomarkers such as the level and function of endothelial progenitor cells (EPC) could prove to be helpful to reflect endothelial damage caused by air pollutants, as it has been recently shown that exposure to ambient fine particles (PM<2.5 μm) induced reversible vascular injury, reflected by depletion of circulating EPC levels, both in humans and mice. It would be valuable to determine whether exposure to ambient PM and UFP in particular result in increased levels of EMPs as well. Interestingly, exposure to secondhand smoking, thought to mimic some of the effects associated with PM exposure and to activate similar pathogenic mechanisms, have been shown to result in increased EMP as well as EPC. Therefore, it would be highly desirable to use these biomarkers in the assessment of vascular effects caused by the exposure to UFP, as suggested by the author.

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REFERENCES


approval. Dronedarone was also given a recommendation as an antiarrhythmic agent for patients with AF on the basis of consistent although modest antiarrhythmic effects. The alphabetically-arranged positioning of dronedarone in ESC guideline flowcharts does not imply that it is superior to other antiarrhythmics within the same category.

Anguita et al.¹ also argue that the ESC guideline picks out hypertension with LV hypertrophy as a distinct pathology to be considered when choosing an antiarrhythmic agent. This was entirely in line with previous and current guidelines except for the Canadian guidelines which chose a range of left ventricular ejection fractions to guide antiarrhythmic drug choice.

Post approval pharmacovigilance data suggested that dronedarone may be associated with hepatotoxicity. One trial found an increase in all-cause mortality, stroke rate and cardiovascular hospitalizations, particularly for heart failure, associated with dronedarone treatment in permanent AF. The ESC has kept in close touch with developments and would re-consider its AF guidelines with a focused update as soon as feasible.

The full text of this article is available only as supplementary material.

CONFLICT OF INTEREST

Both authors were members of the Task Force for the 2010 ESC guidelines on atrial fibrillation, and Prof. Camm acted as Chair of the Task Force.

Prof. Lip has served as a consultant for Bayer, Astellas, Merck, AstraZeneca, Sanofi, BMS/Pfizer, Biotronik, Portola and Boehringer Ingelheim and has been on the speakers bureau for Bayer, BMS/Pfizer, Boehringer Ingelheim, and Sanofi Aventis.

Prof. Camm has served as a consultant and has been on the speakers bureau for various pharmaceutical companies, and was a member of the steering committee for the PALLAS trial.

SUPPLEMENTARY MATERIAL


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REFERENCES


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Comentarios al análisis crítico de la Sociedad Española de Cardiología de la guía de práctica clínica de fibrilación auricular 2010 de la ESC. Respuesta

To the Editor,

We have read with great interest the comments given by professors Lip and Camm regarding our recent critical review of the 2010 atrial fibrillation (AF) guidelines from the ESC,¹ and we would like to thank them for their contributions to our article, which may clarify certain aspects of this subject that were left unresolved, in our opinion, by the guidelines. First of all, we would like to say that we do not refute that female sex, arterial hypertension, heart failure, and vascular disease can all increase the risk of embolism in patients with AF, but it is not clear whether this is the case only in certain situations or as a general rule. As the authors themselves and the guidelines of the ESC recognize, heart failure in the absence of left ventricular systolic dysfunction, controlled hypertension with no ventricular hypertrophy, a diagnosis of angina (with no other evidence of vascular disease), and female sex with no other risk factors for embolism and age <65 years may not constitute significant risk. In fact, in their letter Lip and Camm state that female sex as a lone risk factor, and therefore a CHA2DS2-VASc score of 1, may not require anticoagulant therapy. However, although the text of the ESC guidelines contains this same idea, the tables of recommendations (Tables 8 and 9) include anticoagulation for a score of 1 as a general rule, without specifying any details. We believe that this might confuse doctors reading the guidelines and we assume that it will be clarified in the updated version of the ESC guidelines on AF coming out in 2012. We can agree “in general terms” that the CHA2DS2-VASc scale can identify additional subgroups not covered by the CHADS2 scale and better categorizes patients with a low (0) and high (2 or more) embolic risk score. However, in addition to the fact that not all studies agree that a CHA2DS2-VASc score of 1 reflects a greater risk of embolism,² the greatest caution against applying this standard is the total lack of evidence that anticoagulation therapy in patients with a CHADS2 ≤2 and a low CHA2DS2-VASc (1–2) score provides a significant net clinical benefit if we assess the hypothetical decrease in embolic events versus the possible