LETTERS TO THE EDITOR

doi:10.1093/eurheartj/ehn583
Online publish-ahead-of-print 15 January 2009

Antihypertensive drugs in daily clinical practice: are there differences between genders?

We read with interest the paper by Turnbull et al.1 about whether men and women respond differently to blood pressure-lowering treatment. For this purpose, a total of 31 randomized trials that included 103,268 men and 87,349 women were analysed. Interestingly, achieved blood pressure reductions were comparable for men and women in every trial. For the primary outcome of total major cardiovascular events, there was no evidence that men and women obtained different levels of protection from blood pressure lowering or that regimens based on angiotensin-converting-enzyme inhibitors, calcium antagonists, angiotensin receptor blockers, or diuretics/beta-blockers were more effective in one sex than in the other. The information provided from this study was obtained from randomized clinical trials. Now, the next question is whether these results can be translated into daily clinical practice. In fact, while randomized clinical trials are clearly very important to benchmark the effectiveness and tolerability of therapeutic interventions in a controlled scientific manner, they do not always accurately represent ‘real world’ of clinical practice.2 By definition, if the randomization is well done, no differences should be observed in the clinical characteristics of the study population. However, as surveys report, clinical profile differs between genders. As a result, it is likely a dissimilar prescription between them. In fact, different surveys have commonly reported a different distribution of prescribed antihypertensive drugs between men and women and, in general, a worse blood pressure control in females, what likely implies more cardiovascular outcomes in women.3,4 Moreover, the use of antihypertensive combined therapy might differ between genders.5 In conclusion, although guidelines suggest which drugs in monotherapy or combined are more useful in some clinical conditions such as coronary artery disease or diabetes, more data are warranted to know this according to gender. Despite that, the information provided by Turnbull et al. is clarifier and supports new evidence for the correct management of hypertension for men and women.

References

Vivencio Barrios
Department of Cardiology
Hospital Ramon y Cajal
Madrid
Spain
Tel: +34 91 336 8259
Fax: +34 91 336 8665
Email: vbarrios@meditex.es

Carlos Escobar
Department of Cardiology
Hospital Infanta Sofia
Madrid
Spain

Rocio Echarri
Department of Nephrology
Hospital Infanta Sofia
Madrid
Spain

Jose Julio Jimenez-Nacher
Department of Cardiology
Hospital Ramon y Cajal
Madrid
Spain

Smoking cessation in heart failure: easier said than done

Smoking is an important and preventable risk factor for atherosclerosis and many other diseases. Smoking cessation retards decline in organ function and improves prognosis in patients at risk or with established coronary artery disease prior to the onset of heart failure (HF).1 However, these same risk factors may not predict outcome after the onset of HF. In patients with HF, a substantial body of evidence supports a protective role of increased body mass and cholesterol.2 The importance of physical inactivity is uncertain and the first trial that will adequately address this issue will be presented within the next few weeks.3 Until now, there have been few data on smoking.

The potential harm of smoking in patients with HF was recently challenged by Fonarow et al.4 In their report from the OPTIMIZE-HF study, which included 48,612 unselected admissions due to new or established HF, they noted an association between current smoking and lower in-hospital mortality (2.3 vs. 3.9%, P < 0.001, odds ratio 0.70, 95% confidence interval 0.56–0.88). Whether this is true and whether we have another paradox in HF, namely the smokers’ paradox, warrants further attention. In this study, smokers and non-smokers differed importantly in baseline characteristics and the authors tried to correct for that by extensive inclusion of potential confounders. However, several established predictors of prognosis, including previous hospitalization for HF, time from first diagnosis of HF, dose of drugs that may affect prognosis (ACE inhibitors, β-blockers, and diuretics), and natriuretic peptides were not included.

Although tobacco was used to relief congestion in 18th century,5 recent studies support smoking cessation in the setting of chronic HF.6 In-hospital and population interventions can double the rate of smoking cessation but much more might be achieved.7,8 Patients with chronic HF are frequently seen by medical care providers in hospital or as outpatients. This provides ample opportunity to employ smoking cessation strategies.

Published on behalf of the European Society of Cardiology. All rights reserved. © The Author 2009. For permissions please email: journals.permissions@oxfordjournals.org.