

# Letter to the Editor

Letters to the Editor will be published, if suitable, as space permits. They should not exceed 500 words (typed double-spaced) plus 5 references in length and may be subject to editing or abridgment.

## Masked Hypertension in Untreated and Treated Patients With Diabetes Mellitus

### Attractive But Questionable Interpretations

To the Editor:

We read with great interest the study by Franklin et al<sup>1</sup> on the prevalence of masked hypertension in a large cohort of untreated and treated individuals, with or without diabetes mellitus. The authors report higher cardiovascular risk among untreated diabetics with masked hypertension compared with normotensives, whereas masked hypertension in treated diabetics did not exert any significant impact on cardiovascular outcomes. We were impressed by the authors' unique interpretation of the study findings. However, we would like to draw attention to some aspects that we think are of major importance.

First, the findings in treated diabetics are puzzling. The authors highlight the similar cardiovascular risk among patients with masked hypertension and normotensives. However, they seem to ignore another important finding: the absence of statistical difference in cardiovascular outcomes among normotensives, stage I, and even stage II hypertensives. This finding is in contrast with a vast amount of evidence from large studies pointing toward a significant benefit of blood pressure control in diabetic patients.<sup>2,3</sup>

This, along with the relatively small number of treated diabetics (87 subjects) and the subsequent small number of cardiovascular events, casts significant doubts on the validity of the study findings. Furthermore, the aforementioned factors are likely to explain, at least in part, the findings of the study in treated diabetics.

Another important limitation is the absence of blood pressure data during the follow-up period of the study, as well as the type of anti-hypertensive therapy used. Both factors might significantly affect the outcome of the study. We would be really grateful to the authors if they could provide the relevant information.

Finally, the implementation of study findings in everyday clinical practice raises further concerns. If masked hypertension exerts a significant impact in untreated diabetic patients, then ambulatory blood pressure measurement should be applied in all untreated normotensive diabetic patients. This novel potential indication affects a large number of patients and may represent additional financial and clinical burden on existing indications in hypertensive patients. Moreover, the

clinical usefulness of this information might be questioned because of the absence of robust evidence from large controlled studies that treatment of masked hypertension in untreated diabetics is associated with significant benefits.

Overall, we believe that the interpretation of study findings is novel. However, the findings per se must be considered as hypothesis generating and need to be verified by larger studies. Furthermore, controlled randomized studies are needed to evaluate the effects of treating masked hypertension in diabetic patients and define the clinical usefulness of this aspect.

### Disclosures

None.

**Michael Dumas**

VAMC and George Washington University  
Washington, DC

**Antonios Lazaridis**

**Andromachi Reklou**

Aristotle University of Thessaloniki  
Thessaloniki, Greece

1. Franklin SS, Thijs L, Li Y, Hansen TW, Boggia J, Liu Y, Asayama K, Björklund-Bodegård K, Ohkubo T, Jeppesen J, Torp-Pedersen C, Dolan E, Kuznetsova T, Stolarz-Skrzypek K, Tikhonoff V, Malyutina S, Casiglia E, Nikitin Y, Lind L, Sandoya E, Kawecka-Jaszcz K, Filipovsky J, Imai Y, Wang J, Ibsen H, O'Brien E, Staessen JA; International Database on Ambulatory Blood Pressure in Relation to Cardiovascular Outcomes (IDACO) Investigators. Masked hypertension in diabetes mellitus. Treatment implications for clinical practice. *Hypertension*. 2013; 61:964–971.
2. Patel A, MacMahon S, Chalmers J, et al; ADVANCE Collaborative Group. Effects of a fixed combination of perindopril and indapamide on macrovascular and microvascular outcomes in patients with type 2 diabetes mellitus (the ADVANCE trial): a randomised controlled trial. *Lancet*. 2007;370:829–840.
3. UK Prospective Diabetes Study Group. Tight blood pressure control and risk of macrovascular and microvascular complications in type 2 diabetes: UKPDS 38. *Brit Med J*. 1998; 317:703–713.

## Masked Hypertension in Untreated and Treated Patients With Diabetes Mellitus: Attractive But Questionable Interpretations

Michael Dumas, Antonios Lazaridis and Andromachi Reklou

*Hypertension*. 2013;62:e21; originally published online August 12, 2013;

doi: 10.1161/HYPERTENSIONAHA.113.01693

*Hypertension* is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231

Copyright © 2013 American Heart Association, Inc. All rights reserved.

Print ISSN: 0194-911X. Online ISSN: 1524-4563

The online version of this article, along with updated information and services, is located on the  
World Wide Web at:

<http://hyper.ahajournals.org/content/62/4/e21>

**Permissions:** Requests for permissions to reproduce figures, tables, or portions of articles originally published in *Hypertension* can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the [Permissions and Rights Question and Answer](#) document.

**Reprints:** Information about reprints can be found online at:  
<http://www.lww.com/reprints>

**Subscriptions:** Information about subscribing to *Hypertension* is online at:  
<http://hyper.ahajournals.org/subscriptions/>