

# Re: Beta-Blockade Mitigates Exercise Blood Pressure in Hypertensive Male Patients

---

*Source:* <http://sci.tech-archive.net/Archive/sci.med.cardiology/2007-09/msg00031.html>

---

- *From:* MarilynMann <[mannm@xxxxxxxxxxxx](mailto:mannm@xxxxxxxxxxxx)>
  - *Date:* Fri, 31 Aug 2007 17:33:49 -0700
- 

On Aug 31, 5:49 pm, bigvince <[Vince.Mirag...@xxxxxxxxxx](mailto:Vince.Mirag...@xxxxxxxxxx)> wrote:

On Aug 31, 5:42 pm, MarilynMann <[ma...@xxxxxxxxxxxx](mailto:ma...@xxxxxxxxxxxx)> wrote:

On Aug 31, 5:07 pm, Susan <[neverm...@xxxxxxxxxx](mailto:neverm...@xxxxxxxxxx)> wrote:

x-no-archive: yes

MarilynMann wrote:

His coronary artery calcium score was 488, which is in the 94th percentile for a man his age. Plus there is a family history of early heart attacks. The exercise-induced hypertension may be an issue because his SBP went up to 218 during the stress test.

Didn't you say there's also a family habit of eating in the most atherogenic way possible? Trying to prevent that kind of heart disease without radical dietary changes is offering false assurances.

I'm not trying to antagonize, I guess I'm kind of shocked that with all the homework and discussion done here that you're resting your hopes on those drugs.

Susan

I don't know enough about beta-blockers to have an opinion on them. Statins lower CVD events and mortality, so a statin seems like a reasonable choice here.

His diet is significantly better than what he was brought up with.

Here a recent study

: Pharmacotherapy. 2007 Sep;27(9):1322-33. Links

Discordant Effects of beta-Blockade on Central Aortic Systolic and Brachial Systolic Blood Pressure: Considerations Beyond the Cuff. Epstein BJ, Anderson S.

1 Department of Pharmacy Practice, College of Pharmacy, University of Florida, Gainesville, Florida; Division of Internal Medicine, College of Medicine, University of Florida, Gainesville, Florida.

The role of beta-blockers in uncomplicated hypertension has been challenged recently. Compared with other antihypertensives, beta-blockers are less effective for preventing cardiovascular events in patients with uncomplicated hypertension. Moreover, a recent meta-analysis of placebo-controlled clinical trials concluded that atenolol

is not more efficacious than placebo for preventing cardiovascular events in patients with hypertension. Although these agents lower blood pressure measured conventionally over the brachial artery with a

blood pressure cuff, they do not exert a commensurate effect on blood pressure in the central aorta. Central aortic blood pressure and aortic augmentation index are strong predictors of left ventricular hypertrophy, an independent risk factor for cardiovascular events. Emerging data are illuminating the antihypertensive paradox whereby antihypertensive agents may elicit discordant effects on central and peripheral blood pressure and hemodynamics. Vasodilatory antihypertensives, such as renin-angiotensin-aldosterone system inhibitors and calcium channel blockers, elicit reductions in central

Re: Beta-Blockade Mitigates Exercise Blood Pressure in Hypertensive Male Patients

aortic blood pressure equal to or greater than that in the brachial artery. Conversely, beta-blockers lower central aortic blood pressure to a lesser degree even when blood pressure measured by sphygmomanometry is reduced substantially. Given the strong relationship between central aortic blood pressure and target organ damage, the effectiveness of beta-blockers may be overestimated in practice on the basis of conventional blood pressure measurements alone. Differences in central and peripheral blood pressure may account for the lack of cardiovascular protection afforded by beta-blockers in clinical trials and could account for a portion of the apparent "benefit beyond blood pressure" reduction with other classes of antihypertensive agents. Future studies should aim to better clarify the role of central aortic blood pressure in the treatment of hypertension. In the meantime, the effects of antihypertensive drugs on blood pressure "beyond the brachial blood pressure cuff" should be considered when prescribing antihypertensive agents for a patient.

PMID: 17723086 [PubMed – in process]

Thanks Vince– Hide quoted text –

– Show quoted text –

Vince,

My husband does not have hypertension under ordinary circumstances, only during intense exercise. Apparently there is some evidence that beta-blockers are good for exercise-induced hypertension. I have just started to look at this, so I really haven't formed an opinion yet.

Marilyn

.