

Where are we with Beta Blockers (September 2009)

Beta blockers (along with thiazide diuretics) were formerly a mainstay of hypertension management, and remain indicated as first-line therapy in hypertension for patients with compelling indications (angina pectoris, recent MI, arrhythmias, heart failure). For patients without compelling indications though, with the advent of newer classes of drugs, in particular ACE-inhibitors, calcium channel blockers and angiotensin receptor blockers, available options to the clinician increased;- but as recently as the 2003 JNC-7 guidelines¹ beta blockers were listed as one of 6 possible options as initial therapy for hypertension.

Since then however, it has become evident that traditional beta blockers (principally atenolol and metoprolol) are not as effective at reducing the risk of stroke² as the other 4 classes* (thiazides, CCB's ACE-I, ARB) and that their use as first-line agents (particularly in the elderly) should be restricted to patients with compelling indications.

More recent guidelines for example the BHS/NICE guideline from 2006³ have relegated beta blockers (in those without compelling indications) to an (optional) choice as 4th add-on drug, and it is likely that the JNC-8 guideline (due out early 2010) will suggest something similar.

It should not be forgotten though that the weight of the evidence from hypertension outcome clinical trials (involving a total of several hundreds of thousands of participants) is that the most important goal is achievement of blood pressure targets rather than the drugs or regimens used to achieve those targets.

The place of the newer, vasodilating beta blockers like carvedilol, in the management of hypertension will remain uncertain until we have the results of long-term outcome studies with those drugs.

**Alpha blockers are no longer recommended as first-line therapy either*

1. Chobanian AV, Bakris GL, Black HR et al. The Seventh Report of the National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: The JNC 7 Report. *JAMA*. 2003;289:2560-2572

2. Lindholm LH, Carlberg B, Samuelsson O. Should beta blockers remain first choice in the treatment of primary hypertension? A meta-analysis. *Lancet* 2005;366:1545-53

3. www.nice.org.uk/CG018 NICE guideline. 2006