CONSIDERATIONS REGARDING THE CHOICE OF A BETA BLOCKER FOR FIRST-LINE THERAPY

1. Why are beta adrenergic blockers not recommended as monotherapy for hypertensive patients over 60 years of age who do not have another compelling reason (such as angina or myocardial infarction status).
   - Beta blockers reduce cerebrovascular events to a lesser extent than other blood pressure lowering drugs in older patients with uncomplicated hypertension.

2. Is using beta blockers as monotherapy harmful in the elderly?
   - No, beta blockers do not cause harm in the older hypertensive patients.
     • Beta blockers are strongly indicated in older hypertensive patients with angina, post myocardial infarction or with congestive heart failure.
     • Beta blockers reduce cerebrovascular events in older patients with uncomplicated essential hypertension to a lesser extent than other blood pressure lowering classes.

3. Is using beta blockers as monotherapy as effective at lowering cardiovascular events as other blood pressure lowering classes in younger patients?
   - Meta analysis of blood pressure lowering drug classes indicate beta blockers are equally effective at reducing cardiovascular events compared to other blood pressure lowering classes in younger patients.

4. If I have older patients on beta blocker as monotherapy for uncomplicated hypertension, and their blood pressure is controlled, should I switch therapy?
   - Consideration should be given to switch therapy as the beta blocker will not prevent cerebrovascular events to the same extent as other classes of antihypertensives.
   - Beta blocker therapy should be discontinued cautiously, with tapering to the lowest dose for at least one week prior to discontinuation, and with close observation for rebound hypertension or “unmasking” of coronary artery disease and myocardial ischemia.

5. At what age should I stop prescribing beta blockers as monotherapy for uncomplicated hypertension?
   - The CHEP recommendations suggest age 60.

6. Are there specific younger hypertensive patients where beta blockers should be considered?
   - Beta blockers help prevent migraine and essential tremor, reduce anxiety, and are relatively inexpensive and may, therefore, be specifically helpful in patients where these factors are considerations.

7. Are there younger hypertensive patients where beta blockers are less desirable?
   - Beta blockers are less effective at reducing cardiovascular disease in those who smoke.
   - Patients who are predisposed to beta blocker side effects include those who exercise vigorously, those who wish to lose weight, those with severe peripheral vascular disease or Raynauds Phenomena, those who work in cold environments, those who are predisposed to depression, or those who are predisposed to diabetes.
   - In general, beta blockers should not be combined with a non-dihydropyridine calcium channel blocker (i.e. verapamil, diltiazem) because of the risk for heart block and bradycardia.

Norman Campbell, MD, FRCP
Calgary, Alberta
Treatment of Adults with Systolic/Diastolic Hypertension without Other Compelling Indications

TARGET <140/90 mmHg
INITIAL TREATMENT AND MONOTHERAPY

Lifestyle modification therapy

- Thiazide
- ACE-I
- ARB
- Long-acting CCB
- Beta-blocker*

*Beta-blockers are not indicated as first line therapy for age 60 and above

2006 Canadian Hypertension Education Program Recommendations