

Screen for early signs of cardiovascular disease

with
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The statistics are heart-stopping — cardiovascular disease (CVD) is the number one killer of Canadians, claiming the lives of almost 37% of the population, according to Health Canada statistics gathered in 1997. But among people with diabetes, the risk of death due to CVD jumps to 80% — four people out of five.

The upshot, according to Dr. Bernard Zinman, is that everyone with diabetes should be screened frequently for early signs of CVD, and when those signs appear, treatment should be urgent and aggressive.

Dr. Zinman is director of the Leadership Sinai Centre for Diabetes at Mount Sinai Hospital in Toronto, as well as professor of medicine at the University of Toronto. He was also a member of the Steering Committee that helped prepare the Canadian Diabetes Association 2003 *Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada* (www.diabetes.ca/cpg2003/chapters.aspx).

That document is broken into key sections, including management, complications, and diabetes in special populations. Within the chapter on macrovascular complications, dyslipidemia, and hypertension, the first recommendation states: “The first priority in the prevention of diabetes complications should be reduction of cardiovascular risk...”

Blood glucose control continues to be a significant priority, but the importance of recognizing vascular and renal protection is now well documented.

There are three main CV risk factors: dyslipidemia, hypertension, and platelet dysfunction. The third is the simplest to address — and should be treated in all patients with CVD risk factors, whether they have diabetes or not. The recommended treatment is low-dose ASA therapy (80–325 mg/day), which the Clinical Practice Guidelines note is both effective and economical.

Dyslipidemia is trickier, with different drugs achieving different goals, but statins are decidedly the first choice, followed by fibrates when monotherapy proves ineffective or insufficient. Statins serve best to lower low-density lipoprotein cholesterol, while the fibrates are more effective in raising the beneficial high-density lipoprotein cholesterol and in lowering triglycerides. Bile-acid sequestrants tend to elevate triglyceride levels and are not recommended. Nicotinic acid is also to be used with some caution, as there remains some concern that it aggravates insulin resistance and disrupts glycemic control.

For people with diabetes and no diabetic nephropathy, the Clinical Practice Guidelines now describe hypertension as anything over 130/80 mm Hg. The drugs of choice, in order, are angiotensin-converting enzyme (ACE) inhibitors, angiotensin II receptor blockers (ARBs), cardioselective beta blockers, and thiazide-like diuretics. Alpha-adrenergic blockers are not recommended.

The obvious risk for pharmacists arises in managing the potential adverse effects of polypharmacy.

Best treatment is still drug free

The best treatment for cardiovascular risk is still a healthy lifestyle, according to the CDA Clinical Practice Guidelines. Adopt healthy eating habits, achieve and maintain a healthy weight, engage in regular physical activity, limit sodium and alcohol intake and, above all, stop smoking.

Two CVD risk assessment websites are www.chiprehab.com/CVD/ and www.dtu.ox.ac.uk/riskengine/.

On one hand, the Clinical Practice Guidelines recommend that patients who are not reaching their goals with a monotherapy begin therapy with an alternative antihypertensive or use drugs in combination. On the other hand, they point out that the benefits of treatment correspond to the size of the increments. If blood pressure is lowered a great deal, the patient enjoys a great benefit. If the increment is small, so is the dividend. At some point, the pharmacist may want to join with the physician in accepting a slightly elevated blood pressure if the alternative is adding a third or fourth antihypertensive.



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