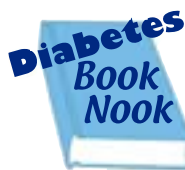


DiabetesSource™

News For The Diabetes Specialist

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The Art of Empowerment

by: Bob Anderson, EdD & Martha Funnell, MS, RN, CDE



This book puts together powerful tools for diabetes educators to help educate and manage patients with diabetes. With four new chapters and a CD-ROM workbook, diabetes educators now have a guide to build solid partnerships with their patients by helping them make informed choices to achieve a healthier lifestyle.

Available online at: www.diabetes.org

Think Like a Pancreas: A Practical Guide to Managing Diabetes with Insulin

by: Gary Scheiner MS, CDE



This book is an interesting read that utilizes humor and practical approaches to address the complex topic of managing diabetes with insulin.

Touching on many of the everyday topics everyone taking insulin needs to master, it provides an organized and systematic approach to demystify the complexities of insulin and glucose regulation.

Available online at: www.amazon.com



The WebMaster

Website Options For Inquiring Minds

National Diabetes Education Initiative

Check out the National Diabetes Education Initiative's website, the leading educational resource for healthcare professionals involved with type 2 diabetes. The website is a great tool that includes live symposia, audio conferences, on-demand CME programs, case studies and PowerPoint slides.

Visit: www.NDEI.org

Diabetes and Heart Matters: Focusing on Lipid Management

By: Valerie W. Hogue, Pharm.D., R.Ph., CDE
President: Health Advance, LLC



Results generated from relevant clinical studies often change the landscape of our practice standards. It is important as educators to continue the quest for evidence-based knowledge in the care of patients. This need for knowledge could not be more critical than when we care for diabetes patients who have experienced or are currently at risk for cardiovascular events.

Reduction of certain risk factors is essential for the health of the heart. Risk factors such as dyslipidemia play a significant role in the development of atherosclerosis, a major contributor in the development of coronary heart disease (CHD). Other risk factors include:

- 1) male \geq 45 years
- 2) female \geq 55 years
- 3) family history of premature CHD (definite MI or sudden death before 55 years in father or other first-degree male relative or before 65 years in mother or other first-degree female relative)
- 4) current cigarette smoking
- 5) hypertension (\geq 140/90 mm Hg or on antihypertensive therapy)
- 6) low HDL-C ($<$ 40 mg/dL)

A negative risk factor for CHD, which would incur the removal of one risk factor from the total count, is having a high HDL-C ($>$ 60 mg/dL). Overall, effective management of the modifiable risk factors reduces the risk of cardiovascular events.

Focusing on Dyslipidemia

Proper management of dyslipidemia can be critical in reducing a patient's risk of developing atherosclerosis. According to the National Cholesterol Education Program's (NCEP) Third Report of the Expert Panel on Detection, Evaluation and Treatment of High Cholesterol in Adults (Adult Treatment Panel III or ATP III), there are three key steps in managing lipid disorders:

- 1) assess the patient's risk
- 2) set goals for therapy
- 3) determine the appropriate therapeutic intervention to meet the established goals.¹

Recently, the ATP III report was updated to include the results of new evidence-based data that influences the level of management of lipid disorders, particularly for diabetes patients.² Several updates to the 2001 report relate to targets set for diabetes patients. Unfortunately, diabetes is considered a risk equivalent to CHD. Consequently, a patient with diabetes carries an equal risk as an individual who has had a CHD event. According to the updated guidelines, individuals with diabetes are at high risk for cardiovascular events i.e., they have a greater than 20% chance of having a heart attack within 10 years. Furthermore, diabetes patients who also have cardiovascular disease, are considered **very high-risk** patients. Below are the ATP III modifications based on recent clinical trials, and the following goals for therapeutic intervention have been set according to the risk assessment.^{2,3}

Risk Category	LDL-C Goal	Initiate TLC*	Consider Rx
High CHD or CHD risk equiv. (10-yr risk $>$ 20%)	$<$ 100 ($<$ 70 optional)**	\geq 100	\geq 100 ($<$ 100 optional)
Moderately High \geq 2 risk factors*** (10-yr risk 10-20%)	$<$ 130 ($<$ 100 optional)	\geq 130	\geq 130 (100-129 optional)
Moderate \geq 2 risk factors (10-year risk $<$ 10%)	$<$ 130	\geq 130	\geq 160
Low 0-1 risk factor	$<$ 160	\geq 160	\geq 190 (160-189 LDL - lowering drug optional)

* TLC = Therapeutic Lifestyle Changes

** Very high-risk patients: recent heart attack, cardiovascular disease with diabetes, severe or poorly controlled risk factors, or metabolic syndrome.

*** Risk factors include cigarette smoking, hypertension (blood pressure \geq 140/90 mm Hg or on antihypertensive medication), low HDL cholesterol ($<$ 40 mg/dL), family history of premature CHD (CHD in male first-degree relative $<$ 55 years of age or female first-degree relative $<$ 65 years of age), and age (men \geq 45 years; women \geq 55 years).

Factors that favor the optional LDL goal of less than 70 included established cardiovascular disease **plus** one or more of the following:

- Acute coronary syndromes
- Multiple major risk factors (especially diabetes)
- Severe and poorly controlled risks (especially smoking)
- Metabolic syndrome

The update did not modify recommendations for individuals who are at moderate or low risk.



Mark Your Calendar!

Upcoming Meetings

American Diabetes Association

- ◆ 66th Annual Scientific Sessions
June 9-13, 2006
Washington, DC
www.diabetes.org

American Association of Diabetes Educators

- ◆ 33rd Annual AADE Meeting
August 9-12, 2006
Los Angeles, CA
www.aadenet.org



In The SPOTLIGHT

Dependable Glutose 15™ Makes Its Way to Kilimanjaro

A little tube of Glutose 15™ manufactured by Paddock Laboratories made it all the way to the highest point in Africa. Set for an adventure of a lifetime, Nora Nimrich, decided to conquer Mount Kilimanjaro. Even with strenuous training for several months, the challenge was destined to be difficult. "I took Glutose 15™ on my two toughest days and believe that it helped me make it all the way to the top. It also helped me get over food poisoning after the climb," notes Nimrich.

Thank you Nora, for sharing your success with using Glutose 15™.



Nora Nimrich
Business Analyst
Minneapolis, MN



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Appropriate management of patients at risk is important, particularly for diabetes patients who are at greater risk. There are two categories of treatment options available for lipid disorders: therapeutic lifestyle change (TLC) and pharmacologic agents. Therapeutic lifestyle changes include a healthy combination of dietary improvement (including low saturated fat and low cholesterol diet plan), weight reduction, and physical activity. Initiation of therapeutic lifestyle change is recommended at any LDL-C level in the high risk or moderately high risk patient with:

- Obesity
- Physical inactivity
- Elevated triglycerides and low high density lipoprotein
- Metabolic syndrome

Specific TLC dietary recommendations have been addressed in an earlier *DiabeteSource™* publication.⁴ Of course, TLC continues to be the foundation of treatment for lowering cholesterol levels.

Pharmacologic therapy for the management of dyslipidemia includes the use of several classes of agents, which include hydroxymethylglutaryl-coenzyme A (HMG-CoA) reductase inhibitors (also known as statins), fibric acid derivatives, nicotinic acid, bile acid sequestrants, and cholesterol absorption inhibitors. Each class has a unique mechanism of action for lowering LDL-C, triglycerides, cholesterol and/or raising HDL-C. Recent clinical evidence suggests that more aggressive lowering of LDL-C through the use of combination therapy is critical to the management of dyslipidemia. Combination therapy achieves greater reductions in LDL-C due to inhibitions that occur through different mechanisms of action.⁵

Achieving the new targets for lowering lipid levels may necessitate the use of more than one class of medications. Therefore, judicious monitoring for efficacy as well as adverse events will be important for the diabetes educator in order to optimize the therapeutic benefit. Teaching our patients to self-monitor for efficacy and side effects will also be helpful. With the availability of rapid lipid results in various settings such as community pharmacies, patients may independently self-monitor their achievement of lipid goals. Equipping them with information regarding the new goals will be an important first step in negotiating their achievement.

Other Vital Interventions

Proper management of hypertension, smoking cessation and initiation of aspirin therapy, where appropriate, are additional interventions that are important for prevention of cardiovascular events in diabetes patients. Hypertension is a major risk factor for CVD; therefore, maintaining a blood pressure below 130/80 with appropriate antihypertensive agents and lifestyle/behavioral therapy is critical for protecting the heart. Several classes of agents are available including angiotension-converting enzyme (ACE) inhibitors, angiotensin receptor blockers (ARBs), β -blockers, diuretics, and calcium channel blockers. Multiple drug therapy may be needed to reach therapeutic goals. However, it is recommended that all patients with diabetes and hypertension be placed on an ACE inhibitor or ARB alone or in combination with other agents. Monitoring renal function, potassium levels, and adverse effects are necessary while on these and other agents.⁶

Aspirin therapy may be used as *primary* or *secondary* prevention of cardiovascular events in diabetes patients *without* contraindications (i.e., aspirin allergy, bleeding tendency, receiving anticoagulant therapy, recent gastrointestinal bleeding, clinically active hepatic disease, or under the age of 21 years). Recommended doses for aspirin are 75-162 mg per day.⁶

Educators should advise patients about the health risks associated with smoking, and to avoid this behavior overall. Patients who are currently engaged in smoking should be provided opportunities to receive smoking cessation counseling and treatment.⁶

Focusing on the heart is important as we care for patients with diabetes. For useful information on heart and vascular disease for patients and professionals, visit <http://www.nhlbi.nih.gov>.

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