

LVH Regresses With Candesartan in Hypertension

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Contributing Writer

MADRID — Antihypertensive therapy with candesartan was shown to reverse left ventricular hypertrophy in a study reported by Dr. Vivencio Barrios at the annual meeting of the European Society of Hypertension.

Regression of electrocardiographic left ventricular hypertrophy (LVH) has been shown to improve the prognosis of hy-

pertensive patients in several recently published controlled randomized trials, "but information on LVH regression in clinical practice has been very scarce," said Dr. Barrios of the cardiology institute at Ramon y Cajal Hospital, Madrid.

Dr. Barrios conducted an open-label, 12-month study evaluating the impact of candesartan, an angiotensin-1 receptor blocker, on LVH in a real-world practice setting. The study involved 276 patients with uncontrolled essential hypertension.

The mean blood pressure at baseline was 164/92 mm Hg. The patients' average age was 62 years, and 18% had diabetes.

The investigators assessed LVH via electrocardiography, using the Cornell voltage duration product (VDP) measurement, as well as QRS-segment duration. The baseline and posttreatment ECG tracings were assessed by a single lab, by a blinded investigator. At the outset of the study, 24% of the patients had LVH.

Patients were treated with candesartan 8

mg/day or 16 mg/day, with the objective of reaching pressures below 140/90 mm Hg for nondiabetics or 130/80 for diabetic patients. The investigators had the option of adding on other antihypertensive medications if the pressure values did not drop into the target ranges after several months.

At 12 months, the angiotensin-1 receptor blocker produced the expected degree of pressure reduction, decreasing the baseline mean values of 164/92 mm Hg to 143/84 mm Hg. It also produced a significant decrease in the prevalence of LVH. By the end of the study, 20% of the study population had ECG evidence of LVH, down from 24% at the outset. Dr. Barrios noted that 19% of those with LVH showed observable LVH regressions.

On average, the VDP was significantly reduced by 132.88 mm × msec, and the QRS interval was reduced by 2.95 msec; both indicate a trend away from LVH.

The Spanish investigators found that the VDP changes were larger in older patients, and in those with higher baseline VDP values, suggesting that candesartan offers the greatest potential benefit in those patients with the most advanced LVH.

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Earlier detection and reversal of LVH has become a burning concern among hypertension specialists who hope that primary care physicians will join them in their efforts to prevent heart failure, for which advanced age and presence of LVH are the two most important risk factors.

"We have data from the 1970s showing that if you do a standard ECG and there are signs of LVH, the risk [of heart failure] is two- to fivefold greater. You really need to do the ECGs, look for LVH, and treat much more intensively," said Dr. Thomas Kahan of the cardiology section at Karolinska Institutet, Stockholm, who chaired a session on heart failure prevention.

"There's a stepwise progression from hypertension to LVH to heart failure. My impression is that we have a lot of risk markers, but we tend not to use them in clinical practice." He insisted that physicians increase their level of scrutiny for LVH whenever they do ECGs or echocardiograms. ■

Web Site for Seniors Reviews Heart Failure

The National Institutes of Health SeniorHealth Web site now offers information about heart failure.

The site includes short segments on recognizing symptoms and reducing risk, and also includes summaries of the latest research and treatment options. For more information, visit <http://nihseniorhealth.gov/heartfailure/toc.html>. ■



Taking TG to heart in diabetes

Elevated Triglycerides in Type 2 Diabetes—A Key Lipid to Treat

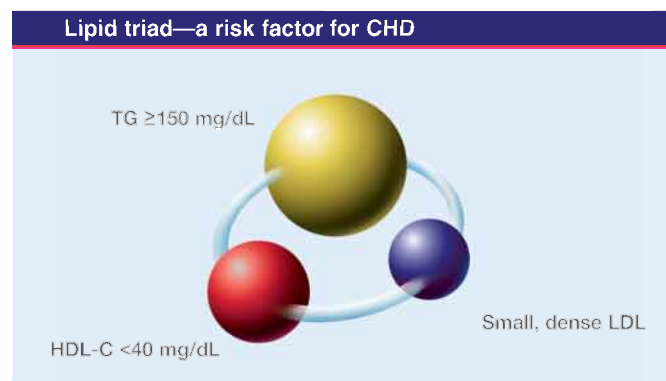
Elevated triglycerides (TG) appears to be an independent risk factor for coronary heart disease (CHD) in patients with diabetes.¹

~42% of adults with type 2 diabetes have TG >200 mg/dL²

Elevated TG is part of three lipid abnormalities that define atherogenic dyslipidemia (the other two being reduced HDL cholesterol [HDL-C] and small, dense, LDL particles) and is typical of patients with type 2 diabetes.^{1,3} Atherogenic dyslipidemia or *diabetic dyslipidemia*, as it may be called in patients with type 2 diabetes, represents a risk factor beyond elevated LDL cholesterol (LDL-C).¹

The Lipid Triad—A Factor for CHD Risk

Three lipid abnormalities—elevated TG, low HDL-C and small, dense LDL particles are often referred to as the *lipid triad*. The lipid triad as a whole is



considered a risk factor for CHD, according to the National Cholesterol Education Program (NCEP) guidelines.¹ It also appears to be the major driving force for coronary atherosclerosis in patients with type 2 diabetes.⁴

Diabetes Increases CHD Risk

Currently, there are an estimated 21 million Americans with diabetes, all of whom are at a greater risk—2 to 4 times—of dying of CHD than people without diabetes.⁵ Diabetes is also a powerful CHD risk factor for women, increasing their CHD risk 3-fold to 7-fold compared to a 2-fold to 3-fold increase in men.⁶ The latest NCEP guidelines indicated that most patients with diabetes are at high risk even in the absence of established CHD.⁷

~65% of adults with type 2 diabetes die due to heart disease or stroke⁵

Need to Target Other Lipid Abnormalities

LDL-C lowering is recognized as the primary lipid target to reduce cardiovascular disease (CVD) morbidity and mortality in patients with and without diabetes. However, it does not remove all risk. Studies have shown that even with low levels of LDL-C, patients with diabetes continued to have a relatively high risk of cardiovascular events.⁸ Therefore, it is critical that other lipid abnormalities (elevated TG, decreased HDL-C) be considered and managed, in addition to LDL-C. In fact, current NCEP guidelines recommend more aggressive goals for TG (<150 mg/dL) and HDL-C (>40 mg/dL).¹ The American Diabetes Association and the American Heart Association both recommend similar goals with an HDL-C target of >50 mg/dL for women.^{9,10} Your guidance and intervention are needed in patients with type 2 diabetes to help them achieve these optimal lipid levels.

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