

# Nonfasting Lipid Level Measures Deemed OK

BY NEIL OSTERWEIL

BOSTON — Nonfasting lipid status may be a better marker for impaired lipid metabolism than fasting lipids, according to a prospective study.

The findings suggest that patients need not deny themselves a good breakfast or lunch before having their blood drawn for plasma lipid testing.

Dr. István Reiber and Dr. Izabella Mező from the Szent György Hospital in Székesfehérvár, Hungary, compared fasting and postprandial lipid levels among 102 nondiabetic patients (44 men), and found that the only significant differences in any lipid parameters were between fasting and nonfasting triglycerides.

It is well known that there are no significant changes in total cholesterol and HDL cholesterol levels between the fasting and postprandial state.

In addition, recent study findings suggest that nonfasting triglyceride concentrations in plasma are more predictive of cardiovascular events than are conventional measures of fasting triglycerides,

the investigators wrote in a scientific poster presented at a symposium sponsored by the International Atherosclerosis Society.

The study participants had never received lipid-lowering drugs. They underwent separate venous blood draws following an overnight fast, 3 hours after eating their usual breakfasts, and 3 hours after their usual lunches.

Overall, the total cholesterol in the

fasting state was 5.51 mmol/L, compared with 5.48 mmol/L after breakfast, and 5.69 mmol/L after lunch, a difference that was not significant.

HDL levels also were comparable between the fasting and postprandial states, at 1.12 mmol/L, 1.14 mmol/L (breakfast), and 1.20 mmol/L (lunch), respectively. Triglyceride levels, however, were significantly higher after eating, rising from 2.21 mmol/L in the fasting state, to

2.31 mmol/L after breakfast, and 2.94 mmol/L after lunch.

The researchers also found that both postprandial triglyceride measures correlated significantly with fasting triglycerides. All volunteers who had fasting triglyceride levels below 1.5 mmol/L had postprandial triglyceride levels below 2.0 mmol/L.

Neither of the investigators disclosed relevant conflicts of interest. ■

## Look for PAD in Rheumatoid Arthritis Patients

COPENHAGEN — Patients with rheumatoid arthritis have a substantially higher prevalence of peripheral artery disease than do similar people without rheumatoid arthritis, based on a case-control study with 101 subjects.

PAD “should not be overlooked in rheumatoid arthritis patients,” Dr. Suzan Abou-Raya said at the annual meeting of the European Congress of Rheumatology. RA patients “should be regularly screened [for PAD] to help reduce their incidence of cardiovascular morbidity and mortality,” said Dr. Abou-Raya of the University of Alexandria (Egypt).

The study enrolled 64 consecutive RA patients (38 women), with an average age of 55 years and an average RA duration of 12 years. The patients had no history of cardiovascular disease. Dr. Abou-Raya and her associates also enrolled 37 healthy controls.

The researchers assessed PAD by the ankle brachial index (ABI). An ABI ratio of 0.9 or less in an artery meant it was obstructed; a ratio of 1.0 to less than 1.3 was normal, and a ratio of 1.3 or greater meant an incompressible artery. Obstructed or incompressible ABIs existed in 19 RA patients (30%) and 2 controls (5%), a statistically significant difference.

In a total of 256 arteries examined in the 64 RA patients, 10 (4%) were obstructed and 20 (8%) were incompressible. Of the 148 arteries examined in the 37 controls, 2 were obstructed (1%) and 1 incompressible (1%).

Dr. Abou-Raya said that she and her associates had no financial disclosures.

—Mitchel L. Zoler

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### Important safety information

Levemir® is contraindicated in patients hypersensitive to insulin detemir or one of its excipients.

Hypoglycemia is the most common adverse effect of all insulin therapies, including Levemir®. As with other insulins, the timing of hypoglycemic events may differ among various insulin preparations. Glucose monitoring is recommended for all patients with diabetes. Levemir® is not to be used in insulin infusion pumps. Any change of insulin dose should be made cautiously and only under medical supervision. Concomitant oral antidiabetic treatment may require adjustment.

Inadequate dosing or discontinuation of treatment may lead to hyperglycemia and, in patients with type 1 diabetes, diabetic ketoacidosis. Levemir® should not be diluted or mixed with any

other insulin preparations. Insulin may cause sodium retention and edema, particularly if previously poor metabolic control is improved by intensified insulin therapy. Dose and timing of administration may need to be adjusted to reduce the risk of hypoglycemia in patients being switched to Levemir® from other intermediate or long-acting insulin preparations. The dose of Levemir® may need to be adjusted in patients with renal or hepatic impairment.

Other adverse events commonly associated with insulin therapy may include injection site reactions (on average, 3% to 4% of patients in clinical trials) such as lipodystrophy, redness, pain, itching, hives, swelling, and inflammation.

\*Whether these observed differences represent true differences in the effects of Levemir®, NPH insulin, and insulin glargine is not known, since these trials were not blinded and the protocols (eg, diet and exercise instructions and monitoring) were not specifically directed at exploring hypotheses related to weight effects of the treatments compared. The clinical significance of the observed differences in weight has not been established.

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**References:** 1. Data on file. Novo Nordisk Inc, Princeton, NJ. 2. Meneghini LF, Rosenberg KH, Koenen C, Meriläinen MJ, Lüddeke H-J. Insulin detemir improves glycaemic control with less hypoglycaemia and no weight gain in patients with type 2 diabetes who were insulin naive or treated with NPH or insulin glargine: clinical practice experience from a German subgroup of the PREDICTIVE study. *Diabetes Obes Metab*. 2007;9(3):418-427. 3. Hermansen K, Davies M, Derezinski T, Ravn GM, Clauson P, Home P, for the Levemir Treat-to-Target Study Group. A 26-week, randomized, parallel, treat-to-target trial comparing insulin detemir with NPH insulin as add-on therapy to oral glucose-lowering drugs in insulin-naive people with type 2 diabetes. *Diabetes Care*. 2006;29(6):1269-1274. 4. Klein O, Lynge J, Endahl L, Damholt B, Nosek L, Heise T. Albumin-bound basal insulin analogues (insulin detemir and NN344): comparable time-action profiles but less variability than insulin glargine in type 2 diabetes. *Diabetes Obes Metab*. 2007;9(3):290-299. 5. Philis-Tsimikas A, Charpentier G, Clauson P, Ravn GM, Roberts VL, Thorsteinsson B. Comparison of once-daily insulin detemir with NPH insulin added to a regimen of oral antidiabetic drugs in poorly controlled type 2 diabetes. *Clin Ther*. 2006;28(10):1569-1581. 6. Danne T, Endahl L, Haahr H, et al. Lower within-subject variability in pharmacokinetic profiles of insulin detemir in comparison to insulin glargine in children and adolescents with type 1 diabetes. Presented at: 43rd Annual Meeting of the European Association for the Study of Diabetes; September 17-21, 2007; Amsterdam, Netherlands. Abstract 0189. 7. Heise T, Nosek L, Rønn BB, et al. Lower within-subject variability of insulin detemir in comparison to NPH insulin and insulin glargine in people with type 1 diabetes. *Diabetes*. 2004;53(6):1614-1620. 8. Data on file. NDA21-536. Novo Nordisk Inc, Princeton, NJ.



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