

Prevalence of Peripheral Artery Disease Rising in United States

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ORLANDO — The prevalence of peripheral artery disease in asymptomatic adults is increasing in the United States, according to data collected on a total of more than 5,000 people by the National Health and Nutrition Examination Survey during 1999-2004.

The spike in peripheral artery disease (PAD) was especially dramatic in asymptomatic women, aged 40 or older, rising from 4.1% during 1999-2000 to 6.3% in 2003-2004, a jump of 54%. Dr. Andrew D. Sumner and his associates reported in a poster at the annual scientific sessions of the American Heart Association. In contrast, the prevalence of PAD in asymptomatic men aged 40 or older fell slightly during the same 6-year period, from 3.3% in 1999-2000 to 2.8% in 2003-2004, a 15% decline.

A likely explanation for the sharp rise in PAD seen in women is an increasing prevalence of obesity, said Dr. Sumner, medical director of the Heart Station and cardiac prevention at Lehigh Valley Hospital in Allentown, Pa. The prevalence of obesity (a body mass index of 30 kg/m² or greater) in women with PAD rose from 32% in 1999-2000 to 47% in 2003-2004.

"Public health initiatives to identify PAD in asymptomatic women and to reduce obesity should be undertaken," Dr. Sumner and his associates said in their poster.

The sharp rise in PAD in women helped to drive an increase seen in all Americans during the period studied. Overall PAD prevalence rose from 3.7% in 1999-2000 to 4.6% in 2003-2004, a 24% jump.

Other subgroups that showed notable rises in PAD were Mexican Americans, in whom PAD prevalence jumped from 2.9% in 1999-2000 to 5.1% in 2003-2004, a rise of 76%, and non-Hispanic blacks, who had a 7.5% rate in 1999-2000 and a 10.8% prevalence in 2003-2004, a 44% increase. In contrast, PAD prevalence was fairly flat in non-Hispanic whites, rising from 3.5% to 4.1%, an increase of 17%.

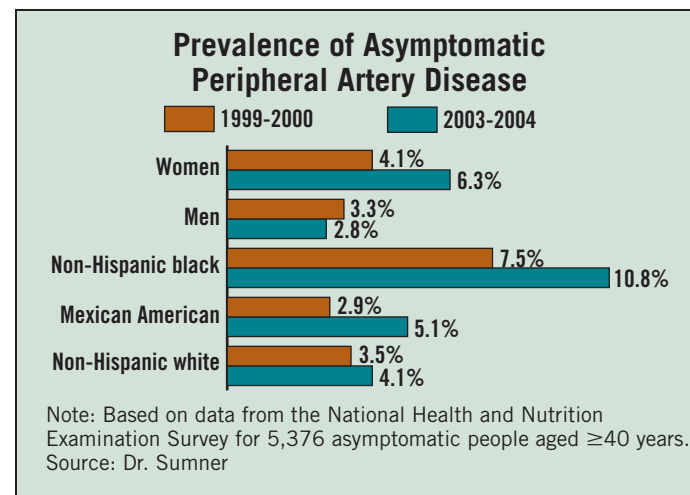
The analysis also showed a clear link between older age and an increased prevalence of PAD. The prevalence of PAD was 1%-2% in asymptomatic people aged 40-49, 2%-3% in those aged 50-59, 4%-8% in people aged 60-69, and about 15% in people aged 70 or older.

Three of these age subgroups showed a clear increase in prevalence during the period studied. Among those aged 40-49, the prevalence rose from 0.9% to 2.0%, a 122% increase. Among people aged 50-59, prevalence rose from 1.8 to 2.8%, a 56% increase. And in people aged 60-69 the prevalence of PAD was 4.2% in 1999-2000, 7.5% in 2001-2002, and 6.1% in 2003-2004, showing a 45% rise in prevalence in between 1999-2000 and 2003-2004. The prevalence rate among people aged 70 or older held fairly steady at close to 15% during all three time periods.

The National Health and Nutrition Examination Survey (NHANES) is run by the Centers for Disease Control and Preven-

tion, which in 1999 began conducting serial national surveys every 2 years (each NHANES prior to 1999 ran longer than 2 years). The 1999-2000, 2001-2002, and 2003-2004 NHANES involved a total of 5,376 asymptomatic people aged 40 or older with no history of

cardiovascular disease. PAD was identified in people who had an ankle-brachial index of less than 0.9. People were excluded from this NHANES examination if they had a bilateral amputation or if they weighed more than 400 pounds. ■



* Model is for illustrative purposes only.

Indications and usage

Levemir is indicated for once- or twice-daily subcutaneous administration for the treatment of adult and pediatric patients with type 1 diabetes mellitus or adult patients with type 2 diabetes mellitus who require basal (long-acting) insulin for the control of hyperglycemia.

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.

For your patients with type 2 diabetes, start once-daily Levemir®

Levemir helps patients with diabetes achieve their A1C goal.^{1,2}

- 24-hour action at a once-daily dose^{3,4}
- Provides consistent insulin absorption and action, day after day^{3,5,6}
- Less weight gain^{7†}

References: 1. 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. 2. 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-naïve people with type 2 diabetes. *Diabetes Care*. 2006;29(6):1269-1274. 3. 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. 4. Phillis-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. 5. Data on file. Novo Nordisk Inc, Princeton, NJ. 6. 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. 7. Data on file. NDA21-536. Novo Nordisk Inc, Princeton, NJ.



Levemir®

insulin detemir (rDNA origin) injection



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