CLINICAL CAPSULES

Simvastatin Raises Retinal Blood Flow Simvastatin increases retinal blood flow and decreases intraocular pressure in healthy subjects, making it a potential treatment for diabetic retinopathy and glaucoma, according to Dr. Taiji Nagaoka of Asahikawa (Japan) Medical College and associates. Noting that long-term statin use has been reported to reduce the risk of retinal ischemic diseases, the researchers assessed the effect of simvastatin on the retinal circulation and on intraocular pressure in 12 healthy volunteers. The subjects were nonsmoking Japanese men aged 19-23 years. They were examined 90 minutes after a single 20-mg dose of the drug on one occasion and after taking a placebo on a separate occasion. They also underwent similar assessments after taking daily doses of either simvastatin or placebo for 1 week. Retinal blood flow increased significantly, by 20% in the retinal arteries and by 23% in the retinal veins, after 1 week of simvastatin therapy. Intraocular pressure decreased significantly, from 14.3 mm Hg at baseline to 12.6 mm Hg after a single dose of the drug and to 12.4 mm Hg after 1 week of therapy. Plasma nitrite/nitrate levels also rose by 60% after 1 week on simvastatin. In contrast, all retinal measurements remained unchanged after administration of the placebo. This is the first study to show that simvastatin increases retinal blood flow, "probably via the increase in nitric oxide," the investigators said (Arch. Ophthalmol. 2006;124:665-70). The increase appears to be exerted mainly on the more downstream vessels in the retinal microvascular network, notably the capillaries, they added. "The increased retinal blood flow associated with treatment with simvastatin may be a potential therapy for diabetic retinopathy," Dr. Nagaoka and associates said.



Sertraline Staves Off Depression

Maintenance therapy with sertraline prevents a recurrence of major depression in diabetic patients whose mood disorder initially responds well to the drug, reported Patrick J. Lustman, Ph.D., of Washington University, St. Louis. Clinical depression has been reported to occur in one-fourth of people with diabetes, and recurrent episodes are common. The researchers evaluated maintenance therapy in 152 patients with either type 1 or type 2 diabetes and major depressive disorder. The study subjects had a mean of five previous episodes of depression. The current episode had resolved with sertraline therapy, at a mean dose of 118 mg per day (range of 50-200 mg per day). Subjects were then randomly assigned to either continue with the same dosage of sertraline that had induced recovery (79 subjects) or to switch to placebo (73 subjects), and were followed for 12 months or until depression recurred. Depression symptoms and glycemic control were monitored in monthly office visits and via telephone interviews at every midpoint between office visits, to permit rapid detection of recurrences. Sertraline was significantly more effective than placebo at prolonging the depression-free interval. At 1 year, the calculated rate of nonrecurrence was 66% in patients treated with sertraline, compared with 48% for those who received placebo, the investigators wrote (Arch. Gen. Psychiatry 2006;63:521-9). The study was supported in part by Pfizer Inc., which provided the sertraline for study subjects.

Give Diabetics ACE Inhibitors, ARBs

Most, if not all, elderly people with diabetes have at least one indication for ACE inhibitors or angiotensin receptor blockers, but only about 40% are receiving the drugs, according to a national survey. Dr. Allison B. Rosen of the University of Michigan Health Systems, Ann Arbor, analyzed data from 4 years of the National Health and Nutrition Examination Survey to calculate the proportion of older diabetic patients with clinical indications for ACE inhibitors or ARBs. Her study sample included 742 respondents who represented over 8 million Americans aged 55 years or older who have diabetes. A total of 92% of the respondents had at least one indication besides diabetes for the medications, according to several sets of guidelines. These indications included albuminuria, cardiovascular disease, congestive heart failure, and hypertension. Two additional risk factors-hyperlipidemia and smoking-are listed as indications on some guidelines, and patients with these risk factors are believed to benefit from ACE inhibitor or ARB therapy. When these two indications were added to the list, 100% of the respondents had at least one indication for the medications, Dr. Rosen said. Yet despite this "nearly universal" indication for treatment, only 43% of the respondents were taking an ACE inhibitor or an ARB, she said (J. Gen. Intern. 2006;doi:10.1111/j.1525-1497. Med. 2006.00351.x). Of particular note, only 53% of those with diabetes and four or more additional indications were taking the drugs, a "disturbingly low" rate for such high-risk patients. -From staff reports