In a recent issue of the journal Archives of Neurology, researchers from Emory University School of Medicine report that men and women with Parkinson's or Alzheimer's disease have a greater incidence of vitamin D insufficiency compared with healthy people.*

Marian L. Evatt, MD, MS, and associates measured 25-hydroxyvitamin D levels in plasma samples from 100 Parkinson's disease patients, 97 patients with Alzheimer's disease, and 99 healthy older participants in Emory's Clinical Research in Neurology database. While 36% of the plasma samples from healthy subjects contained insufficient levels of vitamin D (defined as serum 25-hydroxyvitamin <30 ng/mL), 41% of the Alzheimer's disease patients and 55% of those with Parkinson's disease had insufficient levels of the vitamin.

“We found that vitamin D insufficiency may have a unique association with Parkinson’s, which is intriguing and warrants further investigation,” Dr. Evatt stated.

—Dayna Dye


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Isolavone Supplement Improves Arterial Function After Stroke

Isoflavone supplementation improves indices of endothelial (blood vessel) function in patients with cardiovascular disease, as reported in a Chinese study.*

The study recruited 102 patients with a previous stroke who were being treated medically. Patients were randomly assigned to receive either isoflavone supplement (soy bean extract) 80 mg/day or placebo for 12 weeks.

The main outcome, brachial artery dilatation in response to blood flow, was significantly improved in the supplemented group compared with the control group, and response was even better for patients with more severe disease. Isoflavone supplementation also reduced levels of C-reactive protein, an index of vascular inflammation.

The authors believe this is the first rigorous study to document reversal of endothelial dysfunction with isoflavone in patients who already have heart disease. They conclude, “these findings may have important implications for the use of isoflavone for secondary prevention in patients with cardiovascular disease, on top of conventional cardiovascular interventions.”

—Laura J. Ninger, ELS


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Alpha-Lipoic Acid Protects Nerve Cells From Chemotherapy Damage

Alpha-lipoic acid protects against nerve cell damage due to chemotherapy drugs in a rat model, with possible implications for prevention of peripheral neuropathy (nerve cell degeneration and chronic pain) in patients undergoing chemotherapy.*

Experiments were performed in vitro to simulate chemotherapy-induced peripheral neuropathy. Rat neurons in culture were treated separately with cisplatin and paclitaxel, two common chemotherapy drugs known to cause neurotoxicity. Administered dosages were similar to those used during actual chemotherapy. In some cultures, the chemotherapy drugs were added three hours after pretreatment with alpha-lipoic acid.

Cisplatin and paclitaxel given alone caused marked neuronal damage, cell death, and a decrease in functioning mitochondria (i.e., reduced cellular energy production), but application of alpha-lipoic acid prevented these damaging effects.

According to the authors, “these findings suggest that alpha-lipoic acid might reduce the risk of developing peripheral nerve toxicity in patients undergoing chemotherapy and encourage further confirmatory clinical trials.”

—Laura J. Ninger, ELS
