Many Elderly, Particularly in Nursing Homes, Lack Vitamin D

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SALT LAKE CITY — Even among nursing home residents receiving substantial vitamin D supplements, half or more show deficiencies in the nutrient, according to two separate posters presented at the annual symposium of the American Medical Directors Association.

Researchers who conducted both studies suggested that nursing home residents should routinely receive two or more times the dose of the vitamin currently recommended for healthy elderly people.

“We were astounded to find how prevalent the deficiency in vitamin D was,” said Dr. Todd H. Goldberg, director of geriatrics at West Virginia University Health Sciences Center, Charleston, who conducted the study while he was the medical director of Paul’s Run Retirement Community, Philadelphia.

Dr. Goldberg and his colleagues reviewed the charts of 195 residents of Paul’s Run and the Allegheny Grace School, a home for adults with developmental disabilities, also in Philadelphia, and studied those that included data on concentrations of serum 25-hydroxyvitamin D (25(OH)D) in residents aged 65 years and older in the nursing home affiliated with the medical center. Although 84 residents were on the home’s standard regimen of 800 IU of vitamin D daily, 35 (42%) had 25(OH)D levels under 20 ng/mL, which Dr. Goldberg called “severely deficient.”

In the second study, Dr. William Zirker and Dr. Sri Yenupolu of the Crozer-Chester Medical Center in Upper, Pa., tested for 25(OH)D in 100 residents aged 65 years and older in the nursing home affiliated with the medical center. Although 84 residents were on the home’s standard regimen of 800 IU of vitamin D with 1,200 mg of calcium daily, 35 (42%) had 25(OH)D levels under 20 ng/mL. Of the 16 residents not receiving the standard supplements, 12 were below the target level. “Our conclusion is that you can’t just assume that you’re going to achieve a target level by treating with the recommended supplemental regimen,” said Dr. Zirker, chief of geriatric medicine at the medical center.

Dr. Zirker and Dr. Goldberg suggested different ways in which nursing homes could address vitamin D deficiency despite recommended supplementation.

Of 45 residents who had taken vitamin D and calcium supplements, the levels in 38 were considered sufficient, and 11 had levels labeled ‘severely deficient.’

Conversely, Dr. Zirker advocated extensive blood testing. “We know that vitamin D deficiency is epidemic, particularly in nursing home residents,” he said. “All long-term care residents should have their 25(OH)D level checked after they have been on a standard regimen of 1,200 mg of calcium and 800 IU of vitamin D for at least 1-2 months,” he wrote. Residents with low 25(OH)D concentrations then should receive as much as 50,000 IU a week and then 10,000 IU a month.

In a separate presentation at the AMDA meeting, Dr. F. Michael Gloth II, director of outpatient services for geriatric medicine and gerontology at Johns Hopkins University, Baltimore, said that elderly people absorb 40% less vitamin D than young people do, which reduces vitamin D levels in elderly people by 50%.

In long-term care, “one of the most beneficial interventions one can do is simply give people vitamin D supplements,” he concluded.

Common Sources Of Geriatric Pain

Musculoskeletal
Degenerative joint disease
Spinal stenosis
Fractures
Improper positioning
Contractures

Visceral
Coronary artery disease
Urinary retention
Constipation

Neuropsychiatric
Postherpetic neuralgia
Radiulopathy
Poststroke syndrome
Diabetic neuropathic pain

Metabolic
Vitamin D deficiency
Paget’s disease

Other
Cancer
Fibromyalgia
Oral/dental disorder
Peripheral vascular disease
Polyneuropathy

they are less distracted by pain and are better able to focus and concentrate.

Health care professionals should regard persistent pain in the elderly as treatable, with the potential for improvement in many patients. “We need to get the word out that the management of pain should be moved up the priority list, because we can get these patients feeling and functioning better,” Dr. Karp said.