CORRESPONDENCE

Epidemic Vitamin D Deficiency Among Patients in an Elderly Care Rehabilitation Facility

by Dr. med. Stefan Schilling in volume 3/2012

Appeal for Vitamin D Therapy

Stefan Schilling reported that most geriatric patients in a rehabilitation facility had severe vitamin D deficiency (1).

Our observations in women in nursing homes are rather similar (2). Although the optimal 25hydroxyvitamin D (25[OH]D) concentrations and the potentially multiple health benefits of vitamin D are the subject of intense discussions, the general consensus is that 25(OH)D concentrations below 10 ng/mL (25 mmol/L) affect the skeletal system and require immediate treatment. In view of the fact, however, that 25(OH)D concentrations in most patients in care homes are below 10 ng/mL (25 mmol/L) and meta-analyses of randomized, placebo controlled studies have shown that vitamin D supplementation results in a significant reduction in bone fractures, we wish to point out that existing guidelines actually recommend a daily vitamin D supplementation of 800 IU in such patients.

In agreement with Stefan Schilling we therefore wish to make an appeal for introducing vitamin D supplementation as a routine treatment in care homes. This recommendation is also supported by a metaanalysis of randomized, placebo controlled trials, which shows a significant reduction in mortality as a result of vitamin D supplementation (3).

Although the many questions surrounding vitamin D remain unanswered, and although what we know about vitamin D is likely to be modified in the future, we now carry the responsibility to treat according to the current best evidence, which says very clearly that vitamin D deficiency in the elderly patients described above should be treated.

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Conflict of interest statement

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The remaining authors declare that no conflict of interest exists.

In Reply:

Firstly, I wish to thank the correspondents and the many other colleagues who have contacted me directly with questions and suggestions. This underlines the importance and current relevance of the topic.

In view of the dramatic vitamin D deficiency in old age, I can only support the appeal made by Pilz and colleagues in this journal-namely, to provide vitamin D supplementation for geriatric patients, and I even wish to extend this target group. Pronounced vitamin D deficiency often does not only affect residents of care homes, but also elderly patients who were still living at home before their rehabilitation treatment (1).

As recently as in January 2012, the German Nutrition Society (DGE, Deutsche Gesellschaft für *Ernährung*) quadrupled the recommended daily intake of vitamin D for adults from 200 IU to 800 IU, a notable increase (2). In view of the vitamin D deficiency that affects many elderly people in particular, sufficient intake of vitamin D should be ensured especially in the very old.

I am grateful to Pilz et al for supporting this recommendation. In view of the current data, it would be unjustifiable not to provide vitamin Dsupplementation with its manifold benefits, such as improved bone health and reduction of the risk of falls and fractures, to the geriatric population (3).

The costs of vitamin D are barely worth mentioning: supplementation with the daily recommended intake of 800 IU can be provided for an annual treatment cost of about 5 Euros, if inexpensive preparations are chosen. DOI: 10.3238/arztebl.2012.0359b

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