Osteomalacia after gastrectomy

SIR,—I congratulate Bisballe et al (Gut 1991; 32: 1303–7) for their postgraduate study of osteomalacia in postgastrectomy patients. The authors have found evidence of bone abnormalities by histomorphometry in up to 62% of 51 patients, but only eight patients were considered to have osteomalacia. It is not clear that vitamin D supplementation is beneficial in non-Crohn’s disease bone disorders.

The authors suggest that the low mean levels of 25-hydroxyvitamin D are relevant and thus warrant supplementation. Yet, five of eight patients with a diagnosis of osteomalacia had normal levels, highlighting the lack of value serum measurements may have in predicting bone disorder diagnoses. The authors do not state how many osteomalacic patients had levels that were abnormal (they state only that the mean overall was abnormal). That 1,25-dihydroxyvitamin D levels, the active circulating vitamin D metabolite, were normal in these patients, underscores how complex vitamin D metabolism is and how serum values may not be predictive of an abnormality.

Although the authors agree in their final paragraph that serum biochemical results are of limited value, they use these results as the premise for a therapeutic intervention. They showed that patients who took vitamin D supplementation had higher levels of serum 25-hydroxyvitamin D. It was not sufficient to recommend vitamin D therapy simply because patients have metabolic bone disease. Vitamin D supplements in excess doses can be toxic and may not normalize serum levels.

We recommend vitamin D therapy in those patients on gastrectomy who have metabolic bone disease. Vitamin D supplementation is beneficial in non-Crohn’s disease bone disorders.

The authors do not advocate the use of more potent analogues (1-alpha-vitamin D₃ or 1,25(OH)₂D₃) for postgastrectomy patients. We agree with Dr Bernstein that these compounds demand close monitoring because of the risk for severe intoxication. We have, however, administered daily doses of 18 000 IU calciferol (D₂) over a five year period to more than 200 osteoporotic women (mean age 65 years) without any cases of vitamin D intoxication. Thus, we do not think that vitamin D supplements are dangerous as long as they are given in the form of D₃, analogues in a dose range of 400–800 IU. We agree, however, that a controlled clinical study is necessary in order to test for optimal dose, efficacy and side effects.

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