Clinical Reminders

A cautionary tale: delayed onset rhabdomyolysis due to erythromycin/simvastatin interaction

An 80-year-old gentleman was admitted with a one-week history of myalgia and inability to walk. Investigations revealed an elevated AST (2069 U/l), myoglobinuria (see Appendix Figure I on the website) and high creatine kinase (87564 U/l). He subsequently developed renal failure requiring haemofiltration. His drug history showed a 4-week course of erythromycin whilst concurrently taking simvastatin. This interaction caused delayed onset of rhabdomyolysis from which he made a full recovery.

There are a number of potential interactions with simvastatin, including erythromycin, clarithromycin, itraconazole, ketoconazole, ciclosporin, HIV-protease inhibitors and grapefruit juice. Statins are metabolised by the cytochrome p450 3A4 enzyme, and interactions are thought to be due to the inhibition of this enzyme [1].

The British National Formulary advises avoidance of concomitant use of simvastatin and erythromycin [2]. The simvastatin product advice also states that simvastatin should be discontinued for the duration of treatment with interacting drugs [3].

Although statin-induced rhabdomyolysis is rare, it is important to be aware of this interaction as it is potentially fatal if not recognised and treated early.

Conflicts of Interest
None.

Informed Consent
The patient has signed a written consent form for publication of this case report.

Supplementary data
Supplementary data for this article is available online at http://ageing.oxfordjournals.org.

G. CAMPBELL*, U. JAYAKUMAR, S. MCCracken, J. BENE
Royal Bolton Hospital, Minerva Road, Bolton BL4 0JR, UK
Email: gecampbell34@hotmail.com

*To whom correspondence should be addressed

Disequilibrium due to a vitamin B6 megadosed supplement

An 80-year-old woman was referred by her GP with worsening disequilibrium over the previous 18 months.

Medications included a megadose vitamin B6 preparation (reportedly approximately 200 mg per week).

Examination revealed signs of a dorsal column sensory neuropathy.

Appropriate investigation revealed no other cause for dorsal column sensory loss.

Symptoms and signs improved completely on cessation of the supplement after a period of weeks.

Dorsal column toxicity due to pyridoxine has been described since the 1980s [1–3]. In the series (n = 24, age range 20–53 years), the daily dose of B6 varied from 200 mg to 6 g. Only one serum level was reported as ‘in excess of 30 ng/ml’ (120 nmol/l) [1] which accords with the level (171 nmol/l) demonstrated in this case. A recent case report from the Netherlands suggested a toxic effect of B6 at a daily dose of 24–40 mg in two men in their seventh decade [4]. A similar dose to that is described here.

A safe dose of 150–200 mg daily is suggested by the experience of one US centre [5] albeit in a younger cohort of 70 individuals. The US no-observed-adverse-effect level is set at 200 mg, safe upper limit at 100 mg and recommended daily amount (RDA) 2 mg [6].

Conflicts of Interest
None.


doi:10.1093/ageing/afm110