Editor—I was pleased to see an article on the subject of herbal medicines in the perioperative period relevant to anaesthetic practice.1 Over-the-counter use of herbal medicine is widespread, and as the authors mention, patients are often reluctant to mention their use to medical practitioners.

There are several claims made to specific plant medicines that are not substantiated with relevant data or references. These include outlines of potential adverse effects, pharmacokinetics, and pharmacodynamics.

The authors state that the chronic use of Echinacea can result in hepatic failure, which can then potentiate the effects of other hepatotoxic drugs. This is based on the fact that phytochemical analysis of Echinacea spp. has shown traces of pyrrolizidine alkaloids. These substances have been implicated in potential hepatotoxicity in other species such as Senecio spp. and Symphytum spp. Not all pyrrolizidine alkaloids are hepatotoxic. Those present in Echinacea spp. lack the chemical structure required for said hepatotoxicity.2 Moreover, despite the widespread use of this plant medicine, there are no reports of a significant incidence of Echinacea-associated hepatotoxicity.

There is also an oft-repeated statement that Echinacea is a potent immunosuppressant in the long term. This statement derives from conclusions made from an old study of the effects of Echinacea purpurea on granulocyte phagocytosis stimulation. If anything, the study shows that Echinacea enhances phagocytosis relative to control after 5 days administration, and that this effect returns nearer control levels after a few days of discontinuing the oral dose. Unfortunately, the drop in effect was interpreted as an immunosuppressant effect and this myth has persisted.3,4

Conflict of interest
Prior to medical training, the author qualified as a medical herbalist with the College of Phytotherapy in 1996.

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Reply from the author
Editor—Dr Lucas is right to question the degree of concern attributable to herbal medicines. This, however, is largely due to a lack of formal research into these remedies with most information being from pooled case reports and anecdotal evidence. In addition, clinical studies can be complicated by the lack of consistent composition of the product studied in addition to the effects of unquantifiable additives. Notwithstanding this, Dr Lucas is correct to assert that the alkaloids present in Echinacea may not be associated with hepatotoxicity.

I remain convinced that the messages highlighted in this article are both relevant and important for the safe conduct of anaesthesia for our patients.

Conflict of interest
None declared.

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