Correspondence

Garlic Supplements and Saquinavir

Sir—In their recent article, Piscitelli et al. [1] advise that “patients receiving saquinavir as their sole protease inhibitor should avoid using garlic supplements” [1, p. 238]. In their study, healthy volunteers who received the antiretroviral drug saquinavir and a garlic supplement exhibited a significant decline in plasma levels of saquinavir. As one reason for the decline in systemic levels of saquinavir, the authors suggest that the effect “may be caused by the induction of CYP450 [cytochrome P450] in the gut mucosa” by garlic supplements [1, p. 237].

This warning against taking garlic supplements, stated in the article and publicized in the media, is based on results with a single supplement, GarliPure Maximum Allicin Formula (Natrol), that is standardized with allicin, an unstable compound that is known to convert to polysulfides that induce the production of cytochrome P450. The study and its conclusions do not address the availability of garlic supplements that are not standardized with allicin. For example, Kyolic Aged Garlic Extract (Wakunaga), which is standardized by water soluble S-allyl cysteine, is devoid of allicin and does not induce the production of cytochrome P450.

Thus, a limited conclusion by Piscitelli and colleagues would have been more prudent—namely, that patients receiving saquinavir as their sole protease inhibitor should avoid taking the allicin-standardized garlic supplement they studied. Although additional clinical research is needed, use of a supplement that is not standardized with allicin, such as Kyolic Aged Garlic Extract, may be a safe option for people being treated with saquinavir.

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Reference

Reply

Sir—We agree with Dr. Borek [1] that, despite having data only on the interaction between a single garlic preparation and saquinavir, we drew a generalized conclusion regarding the need for patients to use caution if they combine garlic supplements with saquinavir when using that drug as the sole protease inhibitor [2]. Because we have no information to suggest which constituent (or excipient) in the garlic formulation is responsible for the drug interaction, we cannot speculate about the effects of other commercial products or dietary garlic on the pharmacokinetics of saquinavir or relate our findings to allicin concentrations. We provided data on the allicin (and allin) content of the supplement we studied solely because we considered the verification of product content to be important. Since publication of our article, we have had a study brought to our attention in which garlic supplements were tested for drug release in simulated gastrointestinal conditions: most supplements released far less allicin in such conditions than they did when crushed and suspended in water [3]. Thus, the supplement we used may well release little allicin in vivo. Given the risks associated with reduced antiretroviral concentrations, we consider our conservative interpretation to be appropriate for use in advising patients [4, 5].

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References

Prevention of Nosocomial Fungal Infection: The French Approach

Sir—We recently read with interest 3 articles in Clinical Infectious Diseases about