

POSTER ABSTRACTS

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Incidence of Herbal/Nutraceutical Use in Cardiac Surgery Patients

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Background: An estimated 60 million American adults are reported to use herbal products, with studies showing that 17-33% of the surgical patient population use such agents. Consumers/patients assume, because these products are natural, they are harmless. However, reports of adverse effects, drug-herbal, and herbal-herbal interactions are surfacing. The American Society of Anesthesiologists (ASA) released a patient advisory cautioning patients who take herbal medications to discontinue the products prior to surgery. Many of these herbal and nutraceutical products are advertised to promote improved health and are sold widely throughout the United States.

Methods: Following Institutional Review Board approval, patients scheduled for elective cardiac surgery from January 1999 through June 2000 completed a questionnaire indicating current use of herbals and selected dietary supplements. At the end of the survey period, results were tabulated and compared to their demographic and outcome data recorded in the Society of Thoracic Surgeons National Database. Statistical analysis identified relationships between stated herbal use and nine selected postoperative complications or death.

Subjects were asked to indicate the amount and duration of products taken. Age and surgical procedure were noted. Surveys were completed on 93% (708/763) of the patients undergoing coronary artery bypass only (79%), valve surgery (12%), a combination of the two (6%), or other cardiac procedures (3%).

Results: Herbal and nutraceutical supplements were taken by 15% or 108 of the 708 patients. Garlic, glucosamine, CoQ10, and Ginkgo biloba were the most frequently used. 65% (70/108) of herbal users took one agent and 35% (38/108) took multiple agents with 6 herbals being the maximum number that individuals were currently taking. There was no difference in mortality between users and non-users (1.9% vs. 1.8%). However, users had more red blood cell transfusions (52% vs. 40%, $p = 0.05$) and a trend toward fewer infections (0% vs. 3.4%, $p = 0.06$).

Conclusions: Anesthesia care providers, surgeons, and patients should be aware that these medications may provide a benefit, however they may be harmful. Alterations in the anesthetic or surgical plan may be needed. Further study on the use of such products is warranted.