



High Rate of Herbal Supplement Use by Cosmetic Plastic Surgery Patients

Some Supplements Could Increase Complication Risk, Suggests Study in Plastic and Reconstructive Surgery

Arlington Heights, Ill. (June 28, 2013) – Preoperative evaluations before facial cosmetic surgery find that about half of patients are taking herbal and other supplements, reports a study in the July issue of [Plastic and Reconstructive Surgery®](#), the official medical journal of the [American Society of Plastic Surgeons](#) (ASPS).

"It is extremely important to investigate the use of herbal medicines, as many of these supplements can put the surgical patient at risk," writes ASPS Member Surgeon Dr. Bahman Guyuron and colleagues of Case Western Reserve University, Cleveland. They advise patients to stop taking supplements at least two weeks before cosmetic plastic surgery.

Many Cosmetic Surgery Patients Use Herbal Supplements...

The researchers analyzed 200 patients undergoing cosmetic facial surgery (such as [facelift surgery](#) or [rhinoplasty](#)). The patients' preoperative medication lists were reviewed to determine how many patients were taking herbal supplements and what types they were using. More than 80 percent of patients were women; the average age was 45 years.

Forty-nine percent of patients were using at least one type of supplement. Vitamin and mineral supplements only—most commonly multivitamins, vitamin D, calcium and vitamin B—were used by 25% of patients. Twenty-two percent were taking animal- and plant-based supplements—most commonly fish oil—in addition to vitamins and minerals.

Only 2.5 percent of patients were taking animal- and plant-based supplements only. Older patients and women were more likely to report supplement use.

Overall, patients reported taking 53 different types of supplements. The average number of supplements was 2.8 per patient, although one patient was taking 28 different supplements.

...Many Linked to Bleeding or Other Risks

Thirty-five patients were taking supplements that have been linked to an increased risk of bleeding, such as bilberry, bromelain, fish oil, flaxseed oil, garlic, methylsulfonylmethane (MSM), selenium and vitamin E. In Dr. Guyuron's practice, patients were advised to stop taking supplements two to three weeks before surgery. The researchers write, "Therefore, 17.5 percent of all patients...would have been at risk of bleeding" if they had not discontinued supplement use.

Dietary supplements are widely used in the United States. Since supplements are not regulated, there is a "severe lack" of data on their safety and effectiveness, according to Dr. Guyuron and colleagues. Because patients regard supplements as safe, "natural" products, they may not tell doctors about supplements when asked what medications they are taking.

However, many of these products have side effects that could lead to problems in surgical patients. In addition to the supplements potentially related to bleeding risk mentioned above, other popular supplements with potential adverse effects include echinacea, ephedra (ma huang), ginkgo, ginseng, kava, St John's wort, valerian, feverfew and ginger.

"These high risk supplements...are quite commonly used and the surgeon must elicit a complete history in order to avoid the known adverse consequences of supplement use on surgical outcome," Dr. Guyuron and coauthors write. They emphasize their policy of advising patients to stop taking supplements is consistent with current recommendations for preoperative patient evaluation.

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