

## DRUGS AND HERBAL PRODUCTS IN HOSPITAL PRACTICE: USE AND POTENTIAL INTERACTIONS

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**Background** In the last decade there has been a considerable increase in the use of herbal products. Although herbs are considered as dietary supplements in Italy, evidence is growing that many herbal remedies can lead to clinically serious adverse interactions when taken together with prescription drugs. The aims of this study were to characterize the prevalence and type of herbal remedies taken by preoperative or cardiological patients and to determine potential contraindications/interactions between herbs and drugs. **Methods** From July 2005 to October 2006 elective surgical or cardiological patients in the hospitals of Padova and Dolo (ULSS n. 16 and 13 Veneto Region), were randomly surveyed with self-report questionnaires about herbal and conventional medicines taken in the last 30 days; 536 of 600 questionnaires were completed and returned. Contraindications/interactions were identified by consulting the following databases: Micromedex, Medline Plus and EMBASE. **Results** Among patients, 164 (31%) answered affirmatively to using herbal remedies. Bivariate analysis showed that the use of herbal products was more common among patients aged 25-44 years, females, with high education-level. The odds ratios and 95% confidence interval were 1.7 (1.1-2.5) for female as compared with male patients; 1.6 (1.1-2.3) for subjects with a high level of education compared to subjects with a low educational level. The 8 most frequently used natural products reported were herbal mixtures, chamomile, homeopathic treatments, propolis, fennel, aloe, Bach flower essences, arnica. The major purposes for using these products were to treat gastrointestinal disorders (25%) and stress, anxiety and insomnia problems (23%). After a literature review, some potential contraindications/interactions were found: 15 cases between herbal products and perioperative drugs, 5 cases between herbal remedies and drugs for chronic treatment. Among those who used herbal products in pregnancy (12 out of 34), 2 cases were found of herbal remedies use considered harmful for the possible abortive or teratogenic properties. **Conclusions** Further research, education, and improved communication are needed to safely integrate phytotherapies in health practice especially during the perioperative period. Thus anesthesiologists and cardiologists need to include herbal remedies in their preoperative assessment to avoid potential interactions or contraindications. The widespread use and positive attitude toward herbal products in pregnant women indicate an increased need for documentation about both the efficacy and safety of herbal drugs in pregnancy.