Abstract

Review on the Toxicity and Safety of Medicinal Plants during Pregnancy †

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Introduction: Although herbs are widely used and considered safe, they can be toxic, especially during pregnancy. Most reports of toxic plants are the result of misidentification of the plants in sales records or improper preparation and handling by untrained staff. Therefore, these plants are best managed by experienced staff. Medicinal plant uses can be particularly advantageous to low-income patients, as drug treatment is expensive. It is important for doctors to understand the composition, benefits, and potential toxic effects of the herbs that they dispense and prescribe and to provide preventive and safe treatment. Pregnant women will continue to be a major target for teratological screening for at least the next few years.

Method: Toxicology testing includes pharmacological safety, immunotoxicity and antigenicity, endocrine toxicity, gastrointestinal toxicity, enterotoxicity, nephrotoxicity, hepatotoxicity, and drug studies. Phytochemicals and their metabolites are known to cause uterine contractions and hormonal imbalances, leading to miscarriage.

Conclusions: Advances in new technologies have revolutionized our understanding of biology and may facilitate decisions regarding the identification of teratogens. Serious illnesses during pregnancy pose exceptional challenges to healthcare providers because they have the potential to harm the mother and fetus. Teratogenic effects from poisons or antibiotics can be life-threatening. Plants such as acacia, ailanthus, aloe vera, aristolochia, areca nut, bamboo, cassia, ragweed, lemongrass, and racemic black cohosh should be avoided during pregnancy.

Result: A recent international study found that only 22% of medicinal plants used by pregnant women were safe to use during pregnancy. Similarly, a study conducted in Asia found that only 39% of the most commonly used medicinal plants by pregnant women were safe to use during pregnancy.

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