

ABSTRACT

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Title of Thesis:

Interactions between drugs, medicinal plants and substances of natural origin

This rigorous thesis created overview of herb-drug interactions. Cited literature includes articles published in the journals (British Journal of Clinical Pharmacology), periodicals and internet databases (Web of Science, Science Direct) since April 2007 till June 2010. Of the total 123 medicinal plants the largest amount of interactions was recorded at *Hypericum perforatum* (30,96 %), *Ginkgo biloba* (15,48 %), *Piper nigrum* (9,68 %). Herbs interact mostly with anticoagulants (30,08 %), especially thanks to warfarin; analgetics including antipyretics and NSAIDs (21,95 %); and antidiabetics (18,69 %). In the period 2002 – 2007 the leader interaction position had anticoagulants, too, followed by antihypertensives and acetylsalicyl acid. Interactions can be influenced by interindividual differences, at the test-level there depends on test-sensitivity, concentration of tested drugs and herbs. The number of interactions is increasing. It is necessary to deal with interactions, increase know-how, reduce mistakes among patients and health-care professionals and document new herb-drug interactions.