Jpn. J. Drug Inform., 8 (2): 116～120 (2006).

一般用医薬品と医療用医薬品の相互作用インターネット閲覧プログラムの開発

宇野可奈子*、高中紘一郎

新潟薬科大学薬学部大学院　毒物学研究室　〒956-8603　新潟県新潟市東島265－1

A Method to Detect Drug-Interaction among Over-The-Counter Drugs and Prescription Drugs

Kanako Uno, Koichiro Takanaka

Niigata University of Pharmacy & Applied Life Sciences

(Recevied February 17, 2006
Accepted June 13, 2006)

Abstract

Objective: Although "self-medication" has been recommended recently, the computerized search system for drug-drug interaction of over-the-counter (OTC) drugs and prescribed drugs is not well accepted yet. Using the simplest computer and database system, we developed a method to find drug-interaction including OTC drugs as well as prescription drug on the Web.

Methods: The ingredients of over 10,000 items of OTC-drugs were corded according to their upper 7 digits of the 12 digits of so called "hot code" on the basis of our previous drug-interaction detecting system for prescribed drugs. Several modifications were required such as metal components in OTC-drugs and some other new components. To find a specific drug-interaction with OTC-drugs and prescription drugs on web system, PHP for programming and MySQL for database were employed using the Macintosh OS X.

Results: The database thus provides the drug-interaction for both OTC-drugs and prescription drugs on this Website within 10 to 20 seconds. The warnings and reasons of drug interaction can be accessed through the internet from "http://202.244.210.68".

Conclusion: The drug-drug interaction for prescription and OTC-drugs Website has been successfully operated with the simplest operating system, PHP and database programs. We are conducting further studies to include in our program an automatic data renewal system.

Key words: Drug Interactions, PHP, MySQL, Over-the-Counter (OTC) Drugs