

Drug Information Training Resource

Drug Interactions

Standard Background Questions:

- **What are the symptoms and or signs (the event) ?**
A description of the event, including lab values (e.g. INR), drug plasma concentrations (if appropriate), physical symptoms etc.
- **Time course**
When did the events occur in relation to drugs being started or stopped ?
- **Any significant organ impairment ?**
This could be relevant as a predisposing factor, e.g. renal impairment in the possible interaction between an ACEI and a NSAID.
- **Indication for the drug**
- **Other medical problems**
Drug disease interactions may have to be considered.
- **Other medication**
Three or more drug interactions can occur, e.g. ACEI, NSAID and diuretic.

Background Issues:

- **Inherent toxicity of the drug**
- **Pharmacokinetic parameters of the drug**
- **Quality of the data available on the drug**

Resources

Books

Drug Interactions 5th Edition. Stockley, Ivan H, University of Nottingham Medical School, Nottingham, UK
Pharmaceutical Press 1999

<http://www.pharmpress.com/>

Comments

Based on the many thousands of published clinical papers and reports, Drug Interactions provides a series of detailed yet concise synopses designed for quick and easy reference. Each synopsis contains summary, details of the interaction under discussion, its probable mechanism, clinical importance and management. The book will soon be available electronically on the Internet, see <http://stockley.vhn.net/>

British National Formulary. London, UK; British Medical Association and Royal Pharmaceutical Society of Great Britain.

<http://www.bnf.org/>

Comments

Section on drug interactions.

Hansten and Horn

Drug Interactions Analysis and Management is a loose-leaf publication that provides information about drug-drug and drug-food interactions in a quick reference format. This quarterly reference provides descriptive monographs of drug interactions selected on the basis of their potential to alter patient outcomes. Based on published clinical information as well as case studies, each monograph contains a drug significance rating for ease of interaction detection and provides guidance for managing interactions as they occur.

Managing Clinically Important Drug Interactions is a bound version of DIAM, condensed to include those monographs that contain level 1 and 2 interactions along with those level 3 interactions most likely to affect patient outcomes. It is ideal for physicians, nurse practitioners, physician assistants, and students who do not have the need for frequent updates.

The Top 100 Drug Interactions: A Guide to Patient Management is a pocket book containing over 2200 common drug interactions. The table of P-glycoprotein and cytochrome P450 substrates, inhibitors, and inducers has been expanded to include over 210 drugs. Brand new to this edition is a listing of interacting drugs that are known to prolong the QTc interval or produce torsades de pointes arrhythmia. The table of herb-drug interactions has been updated as well. Drug interaction entries are easy to find in the index by either trade or generic name. The Top 100 Drug Interactions is a handy, authoritative drug interaction resource intended for all practitioners.

<http://www.hanstenandhorn.com/>

WebSites

Cytochrome P450 drug interactions table

<http://medicine.iupui.edu/flockhart/>

Grapefruit Juice-Drug Interactions

<http://powernetdesign.com/grapefruit/>

Comments

Drug Interactions with anti-HIV drugs

<http://www.projinf.org/fs/drugin.html>

Comments

Drug Interactions with Psychotropic Medicines

http://www.nzhp.org.nz/Psych_drugint.pdf

P-Glycoprotein drug interactions

<http://www.mhc.com/PGP/>

St John's Wort Interactions

<http://www.health.gov.au/tga/docs/html/info.htm>

Journal Articles

Cupp MJ Herbal Remedies: Adverse Effects and Drug Interactions. Am Fam Phys March, 1;1999

<http://www.aafp.org/afp/990301ap/1239.html>

Tredger MJ, Stoll S. Cytochromes P450. Their impact on drug treatment. Hospital Pharmacist 2002;9:167-73

http://www.pharmj.com/pdf/hp/200206/hp_200206_cytochromes.pdf

Kirk JK, Lightfoot SM, Conner SL. Some clinically important drug interactions. Pharmacy Times.

<http://www.pharmacytimes.com/interactce.html>

Search Tips

Medline [PubMed](#)

Recommended MeSH Terms

[Drug Interactions](#)

Exploded this includes:

Drug Synergy

Drug Antagonism

Food-Drug Interactions

Sensitivity Tips

Avoid initial use of subheadings with drug names.

Avoid the initial use of the "interaction" concept, especially if only expect a few hits. The concept can be added later if too many hits are retrieved.

Specificity Tips

Choose the specific drug if there is too much noise from related drugs.

Add the concept drug interaction as MeSH and text word.

Consider use of subheadings.