

آشنایی با تداخلات دارویی و غذایی مهم فرآورده های گیاهی

ارائه دهنده: دکتر الهه محمودزاده

Abbreviations

- ▶ ALT Alanine aminotransferase
- ▶ AST Aspartate aminotransferase
- ▶ LFT Liver function test
- ▶ COX Cyclo oxygenase
- ▶ CYP Cytochrome p
- ▶ ADME Pharmacokinetic interactions
- ▶ CAM Complementary and alternative medicine
- ▶ PTT Partial thromboplastin time
- ▶ WHO World Health Organization

Incidence of herbal medicines interactions

who uses herbal medicines?

- ▶ Asians
- ▶ Europeans
- ▶ USA
- ▶ Australasians
- ▶ ...

Herbal medicine use in specific patient groups

- ▶ Cancer patients
- ▶ Patients on weight loss programmes
- ▶ Hospital inpatients
- ▶ ...

Differences in herbal use in specific population groups

- The elderly
- Children
- Gender
- Educational level and knowledge of herbal products
- Rural populations

Attitudes to the use of herbal medicines

Interactions between herbal medicines and conventional drugs

Variability of herbal medicines

Mechanisms of drug interactions

- ▶ Pharmacokinetic interactions
- ▶ Pharmacodynamics interactions

Pharmacokinetic interactions

Interactions are those that can affect the processes by which drugs are absorbed, distributed, metabolized, and excreted.

✓ **Cytochrome P450 isoenzymes**

- a) Enzyme induction
- b) Enzyme inhibition
- c) Predicting interactions involving cytochrome P450

Drug transporter proteins

- ▶ P- glycoprotein
- ▶ Organic anion transporter (OATs)
- ▶ Organic anion transporter polypeptides (OATPs)
- ▶ Organic cation transporter (OCTs)
- ▶ ...

Pharmacodynamics interactions

- Additive or synergistic interactions
- Antagonistic or opposing interactions

Conclusions

- ▶ Be on the alert with any drugs that have a narrow therapeutic window
- ▶ Think about the basic pharmacology of the drugs under considerations
- ▶ Keep in mind that the elderly are at risk because of reduced liver and renal function on which drug clearance depends.

References

- *Stockleys Drug Interactions*
- *UPTODATE*
- *Medscape*

ANY
Questions?