Drug-Drug Interactions: Safe Prescribing to Avoid Malpractice

Wendy L. Wright,
DNP, ANP-BC, FNP-BC, FAANP, FAAN, FNAP
Family Nurse Practitioner
Owner - Wright & Associates Family Healthcare
Amherst, New Hampshire and Concord, NH
Owner– Partners in Healthcare Education, LLC

1

Disclosures

- Speaker Bureau:
  - Sanofi-Pasteur, Merck, Pfizer: Vaccines
  - AbbVie and Biohaven: Migraines
- Consultant:
  - Sanofi-Pasteur, Merck, Pfizer, Moderna, and Seqirus: Vaccines
  - GlaxoSmithKline: OA and Pain
  - Bayer: Chronic Kidney Disease
  - Idorsia: Insomnia
  - Shield Therapeutics: Iron Deficiency Anemia

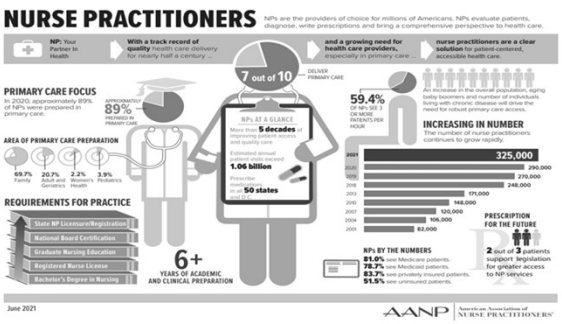
2

Objectives

- Upon completion of this lecture, the participant will be able to:
  - Discuss the most common mechanisms for drug-drug interactions
  - Discuss techniques to ensure safe prescribing to prevent malpractice
  - Review cases involving prescribing errors and medical malpractice cases

3

AANP Infographic 2021



4

2021

- 325,000 Advance Practice Nurses
- > 1.06 billion visits annually to a nurse practitioner
- 59.4% of NPs see 3 or more patients per hour
- NPs prescribe in all 50 states
- Average length of primary care visit 16 minutes
  - 6 topics addressed

www.aanp.org accessed 03-01-2022

5

Common Prescribing Errors

6

What Is a Drug-Drug Interaction?

- A drug-drug interaction occurs when the co-administration of two or more drugs alters the absorption, bioavailability, or excretion of either/both drug(s)
  - Taking interacting drugs together can potentially delay, decrease, or enhance absorption, affect a drug's pharmacology at the target, or influence drug metabolism or excretion.
  - This can decrease or increase the action of either drug or both drugs, or cause adverse effects and unintended consequences.

Wright, 2022

7

Drug-Drug Interactions

- Drug interactions:
  - Are becoming increasingly more common
  - Individuals are taking more and more medications
  - For instance, the average patient with hypertension is on 3.2 agents to control blood pressure
  - The average patient with diabetes is on 5 different medications

Wright, 2022

8

Malpractice Suits

- Drug interactions
  - Drug interactions: Now the 4th leading cause of death in the United States
  - Now: 4th - 6th leading cause of malpractice suits against nurse practitioners, physician assistants, and physicians

Wright, 2022

9

Many Common Complaints Can Occur From a Drug/Drug Interaction

- Fatigue
- Constipation or diarrhea
- Confusion
- Incontinence
- Falls
- Depression
- Weakness or tremors
- Excess drowsiness or dizziness
- Agitation or anxiety
- Decreased sexual behavior

Wright, 2022

10

3 Mechanisms For Drug Interactions

- Drug Interactions
  - 1. Drug interactions occur when medications utilize the same enzyme in the liver for metabolism
  - 2. Can also occur if one medication interferes with another medication's excretion through the kidneys
  - 3. Can occur if multiple "highly protein bound drugs" are given to a patient

Wright, 2022

11

Let's Start With Drug Interactions Which Occur Through CYP 450

Wright, 2022

12

Cytochrome P450

- History of CYP450
  - Not much was known about this drug metabolism system until Seldane and erythromycin began to producing Torsade de Pointe
- CYP450: Enzymes, found within the liver, which metabolize various medications
- Many medications utilize these pathways for metabolism

Wright, 2022

13

CYP450

- Purpose of this enzyme system is to metabolize a substance so that it may be broken down and excreted or so that it may be delivered to the tissues on which it will act

Wright, 2022

14

CYP450

- The cytochrome (CYP450) isoenzymes are a group of heme-containing enzymes embedded primarily in the lipid bilayer of the endoplasmic reticulum of hepatocytes

Wright, 2022

15

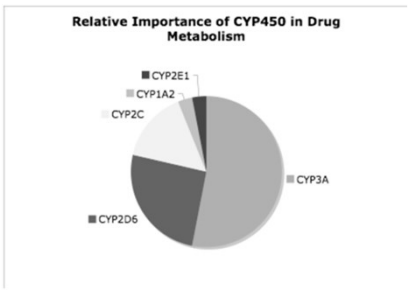
Pathways

- There are a number of enzymes or pathways
  - 1A2
  - 2C9
  - 2C19
  - 3A4
  - 2D6

Wright, 2022

16

Weighted Importance of CYP450



Wright, 2022

17

Terminology

- Substrates
  - Metabolized by the isoenzyme
- Inhibitors
  - Block the activity of the isoenzyme
  - Inhibition most often occurs as a result of competitive binding at the enzyme's binding site
- Inducers
  - Accelerate the activity of the isoenzyme

Wright, 2022

18

Inhibitors

- Inhibitors are ranked:
  - Strong inhibitors
    - > 5-fold increase in the plasma AUC values or more than 80% decrease in clearance
  - Moderate inhibitors
    - > 2-fold increase in the plasma AUC values or 50-80% decrease in clearance
  - Weak inhibitors
    - > 1.25-fold but < 2-fold increase in the plasma AUC values or 20-50% decrease in clearance

http://medicine.iupui.edu/clinpharm/ddis/main-table/ accessed 01-15-2017

19

Examples of Common Drug Interactions

CY P450 Isoenzyme	Drug Substrate	Drug Inhibitor	Drug Inducer
1A2	Caffeine Theophylline	Cimetidine Fluvoxamine (Luvox) Ticlopidine (Ticlid) Fluoroquinolones	Tobacco Nicotine

Adapted from: Abramowicz, M. (1999). Drug Interactions. The Medical Letter on Drugs and Therapeutics, 41(1056) 61-62.

20

Let Us Look At An Example!

- Patient drinks 4 cups of coffee per day
  - Caffeine is a substrate
- You prescribe ciprofloxacin
  - Ciprofloxacin is an inhibitor (strong inhibitor)
- What happens to the caffeine levels?
- About what will the patient complain?

21

Another Example

- Patient is on theophylline for COPD
  - Substrate
- Smoking (Nicotine)
  - Nicotine is an inducer
- What have you had to do with the theophylline to get this patient to a therapeutic goal?
- Patient develops AECB and quits smoking
- What happens to theophylline levels?

Wright, 2022

22

CY P450 3A4

- This is the location of most drug-drug interactions
- 50% of medications are metabolized through this pathway

Wright, 2022

23

Examples of Common Drug Interactions

CY P450 Isoenzyme	Drug Substrate	Drug Inhibitor	Drug Inducer
3A4	Amiodarone Diltiazem Felodipine Nifedipine Verapamil Lovastatin Simvastatin	Amiodarone Clarithromycin Erythromycin Fluconazole Itraconazole Ketoconazole Suboxone	Barbiturates Carbamazepine Phenytoin Rifampin Phenobarbital Hypericum

Adapted from: Abramowicz, M. (1999). Drug Interactions. The Medical Letter on Drugs and Therapeutics. 41(1056) 61-62.

Wright, 2022

24

Examples of Common Drug Interactions

CY P450 Isoenzyme	Drug Substrate	Drug Inhibitor	Drug Inducer
3A4	Atorvastatin Quinidine Alprazolam Diazepam Methadone Sildenafil	Grapefruit juice Ritonavir Fluoxetine Nefazodone	Barbiturates Carbamazepine Phenytoin Rifampin Phenobarbital Hypericum

Adapted from: Abramowicz, M. (1999). Drug Interactions. The Medical Letter on Drugs and Therapeutics. 41(1056) 61-62.

Wright, 2022

25

Also Important

- Drugs that are substrates of the same CYP 450 substrate can inhibit each other's metabolism, possibly resulting in drug toxicity

Wright, 2022

26

Let Us Look At Another Patient

- 78 year-old woman with asthma, hypertension, hyperlipidemia, obesity, osteoarthritis
  - Currently on numerous medications including Zocor (simvastatin) 80 mg qhs
- Develops chest pain, rules-in for an MI and undergoes a 6-vessel CABG
  - Started on Amiodarone
- 4 weeks later: Creatinine 3.0; LFTs-2x upper limits of normal (had all been normal in patient and before surgery)
  - Cardiology consulted – recommend gastroenterology evaluation; Gastro said it was a reaction to the Zocor
- 1 week later – Creatinine 3.2
- What really is going on?

Wright, 2022

27

Drugs Frequently Involved in Interactions

- Statins
  - Lova, simva, atorva
- Amiodarone
- Telithromycin, erythromycin, clarithromycin
- -Azoles
- -Antivirals

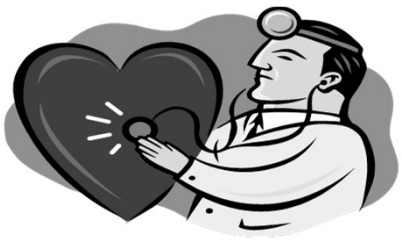
28

Ideally, a Medication Would Use Multiple Pathways for Metabolism

- Some medications use multiple pathways
- This is ideal
  - If one pathway is being utilized by multiple medications, the medication can be metabolized by the other pathway

29

Another Example



30

CW

- CW is a 52-year-old woman who presents to discuss her recent cholesterol profile
  - Lab results are as follows:
    - Total cholesterol: 286
    - HDL: 46
    - LDL: 199
    - Triglycerides: 154
    - Risk ratio: 6.22
    - LFT's: normal

Wright, 2022

31

Treatment

- CW has been on a diet and exercise plan for the last 3 months attempting to lower her cholesterol without pharmacotherapy
- At today's visit, atorvastatin therapy initiated
- Dosage: 20 mg qhs

Wright, 2022

32

HMG Co-A Reductase Inhibitors

- Metabolized through the liver
  - Liver is the primary site of elimination for the majority of medications on the market
  - Statins are no exception
  - The liver contains numerous enzymes that oxidize or conjugate drugs
- CYP450 is involved in the metabolism of most statins
  - In fact, most statins use the 3A4 pathway
  - Pravastatin is one exception; it is not metabolized through the CY P450 system; Crestor (rosuvastatin – 2C9)

Wright, 2022

33

Caution: CY P450 3A4

- Caution: Medications using CY P450 3A4
  - Avoid azole medications (rhabdomyolysis)
  - Avoid concomitant gemfibrozil (rhabdomyolysis)
  - Avoid erythromycin and clarithromycin (increases statin AUC by 50%)

Wright, 2022

34

Laboratory Monitoring

- Laboratory Monitoring
  - Lipid profile, liver function testing and CK before beginning medication
  - Repeat liver enzymes as deemed appropriate by provider (periodically)
  - Only recheck CK as needed for symptoms

Wright, 2022

35

6 Months Later

- CW calls complaining of cramping in her feet only at night
- It is occurring every night
- This is new; she has never had anything like this before and because of our discussion regarding potential side effects of the statin class, she decided to call
- She was advised to stop atorvastatin and come into the office for an evaluation and a few additional laboratory tests

Wright, 2022

36

Rhabdomyolysis

- Concern regarding rhabdomyolysis
  - Fatigue
  - Myalgias
  - Cramping
  - If these occur:
    - Discontinue the drug
    - CK (Done to exclude muscle involvement)
    - LFTs (full liver panel is recommended because we are now potentially dealing with a significant problem)

Wright, 2022

37

CW's Labs

- Physical examination: normal; no evidence of tender or edematous muscles
- CK: 3305 (normal level: 20-170)
- Chemistry panel: normal
- Urinalysis: normal
- CBC with differential: normal

Wright, 2022

38

Rhabdomyolysis

- Laboratory Features:
  - Elevated CK-MM** Most sensitive test
    - With rhabdo, range is often: 500 - >100,000 units/L
    - Degree of elevation roughly correlates with the risk of renal failure

Wright, 2022

39

What Changed?

- Why did this happen?
- CW went to a walk-in center
- Diagnosed with “walking pneumonia”
- Given a prescription for clarithromycin

40

Remember CY P450 3A4

- Atorvastatin is a substrate
- Clarithromycin is an inhibitor
- Blocks 3A4 enzyme causing atorvastatin levels to increase significantly (50%)

41

CYP450 and Statins

Medscape® www.medscape.com

CYP 1A2	CYP 2C9	CYP 2C19	CYP 2D6	CYP 2E1	CYP 3A4
Acetaminophen	Alprenolol	Diazepam	Amitriptyline	Acetaminophen	Amiodarone
Caffeine	Diclofenac	Ibuprofen	Codeine	Ethanol	**Atorvastatin**
Theophylline	**Fluvastatin**	Mephenytoin	Debrisoquine	Halothane	Clarithromycin
	Hexobarbital	Methylphenobarbital	Flecainide		Cyclosporine
	Phenytoin	Omeprazole	Imipramine		Diltiazem
	Rosuvastatin	Phenytoin	Metoprolol		Erythromycin
	Tolbutamide	Proguanyl	Nortriptyline		Itraconazole
	Warfarin	**Rosuvastatin**	Pherexiline		Ketoconazole
			Propafenone		Lacidipine
			Propranolol		**Lovastatin**
			Sparteine		Mibefradil
			Thioridazine		Midazolam
			Timolol		Nefazodone
					Nifedipine
					Protease inhibitors
					Quinidine
					Sildenafil
					Simvastatin
					Terbinafine
					Verapamil
					Warfarin

http://www.medscape.com/viewarticle/542774_4 accessed 12-20-2013

42

What Psychiatric Medications Can Do The Same Thing?

- Nefazodone
- Alprazolam

Wright, 2022

43

Interactions Involving Renal System

Wright, 2022

44

Lithium



Wright, 2022

45

CF

- CF is a 62-year-old female with bipolar disorder
- Currently maintained on Lithium 300 mg 2 tablets po bid
- Has been on this dosage x years and doing relatively well; moods are stabilized
- Employed in a steady job; marriage going well
- Presented to family physician for bilateral knee pain
- Diagnosed with osteoarthritis; started on naproxen

Wright, 2022

46

CF Presents 3 Weeks Later

- Husband is concerned
- Seems more confused
- Complaining of dizziness, nausea, and tremor
- Began approximately 1 week ago and seems to be worsening
- CBC with diff, CMP, UA, Lytes, Lithium level, TSH and CT scan obtained

Wright, 2022

47

Laboratory Values

- CBC with diff: normal
- CMP: normal
- Lytes: normal
- UA: normal
- Lithium level: 2.2 mEQ/L (normal: 0.8 mEq/L – 1.2 mEq/L)
- CT scan: normal

Wright, 2022

48

What Changed???

- What caused a sudden change in this woman?
  - Is this delirium?
  - Medication
  - TIA?
  - CVA?



Wright, 2022

49

Lithium

- Lithium is cleared completely through the renal system
- Drugs and conditions that influence renal excretion stand the potential for increasing serum lithium concentrations
- Such drugs include: thiazide diuretics, NSAIDs, ACE inhibitors, Calcium channel blockers (diltiazem and verapamil), Caffeine

Wright, 2022

50

Let's Talk About NSAIDs and Lithium

- NSAIDs
  - Have been associated with increasing lithium plasma levels to toxic levels
  - OTC medications can produce the same effect yet it is not seen as much as anticipated when they went OTC
  - ? Lower dosage
  - If you need to use an NSAID in a patient with lithium: consider aspirin and sulindac
  - Less likely to cause toxicity



Wright, 2022

51

Thiazides and Lithium

- In fact, concomitant use of diuretics has long been associated with the development of lithium toxicity
  - Thiazide diuretics are thought to be the worst because they act distally on the renal tubule (same location as lithium is cleared) causing an increase in the re-absorption of lithium

Wright, 2022

52

Think of All the Antihypertensives

- Most antihypertensives now have HCTZ in them
- Easy for a drug interaction to occur

Wright, 2022

53

Other Drugs Can Lower Lithium Levels

- Osmotic diuretics enhance lithium excretion and are often used for lithium toxicity
- Caffeine and theophylline also decrease lithium levels and therefore need to be monitored if used concomitantly

Wright, 2022

54

Laboratory Monitoring in Individuals on Lithium

- Consider lithium level q 3-5 days when initiating any new therapy
- Drugs like lithium have a therapeutic level that is close to the toxic level
  - This is called a Narrow Therapeutic Index (NTI)
  - Elders generally need 50% less the dose of a younger adult/individual
- Therefore, you must closely monitor lithium levels when new drugs are added

Wright, 2022

55

Other Labs to Monitor in Patients Taking Lithium

- TSH (lithium decreases thyroxine production by interfering with iodine absorption)
- Calcium (increased levels)
- Glucose (increased levels)
- Potassium (increased levels)

- If patient is on a stable dosage, can monitor these every year

Wright, 2022

56

Other Medications Which Can Alter The TSH

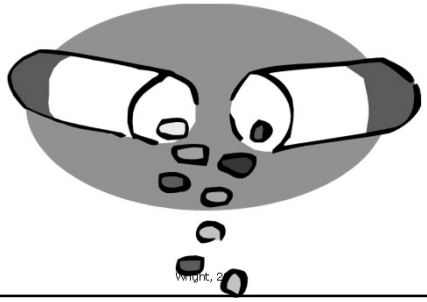
- Amiodarone
- Lithium
- Interferon

- Why??

Wright, 2022

57

Anticoagulation Therapy



Wright, 2

58

GP

- 76 year-old-female who presents complaining of increasing shortness of breath, weight gain, and progressively worsening ankle edema
  - Began approximately 1 week ago and is worsening
  - Feels like her heart is "skipping beats"
- PE: Weight 348 pounds (up 24 pounds in past month)
- Lungs: bibasilar crackles
- Heart: irregularly irregular
- PV: 3+ pitting edema to the mid-shins

Wright, 2022

59

GP

- Echo: dilated cardiomyopathy
  - LAE and RAE
  - EF-45%
- ECG: Atrial fibrillation; Ventricular response: 100 bpm
  - No Q waves; T wave inversion in II, III, and aVF

Wright, 2022

60

GP

- Admitted to CICU for further evaluation
- Diagnosis:
  - CHF
  - Atrial fibrillation
  - Negative cardiac enzymes
- Anticoagulation initiated

61

Warfarin (Coumadin)

- First identified in the 1940's
- Became prominent in 1955 when Dwight D. Eisenhower was given warfarin after he suffered an MI
- At present, 2 million individuals are taking coumadin
- Yet…Only 1/3-1/2 of eligible patients are currently prescribed this drug

62

Actions of Warfarin

- Inhibits the synthesis of vitamin K-dependent clotting factors which include: Factors II, VII, IX, and X; and the anticoagulant proteins C and S
- Completely absorbed after oral administration
  - Peak concentration is attained within the first 4 hours
  - 98% of warfarin is bound to plasma proteins
    - Therefore, need to be aware that any highly protein bound drug added on to the individual taking warfarin may end up displacing warfarin (increasing warfarin levels and thus raising INR)

63

GP

- GP failed to convert to NSR despite elective cardioversion
- Opted to maintain her on warfarin
- 6 months into therapy: INR which was previously controlled at 2.5-3.0; average: 2.8
- Now…INR 4.3
- What has changed????

64

Review of Diet and Medications

- GP decided to start herself on garlic and ginkgo for cardiovascular disease prophylaxis
- Also wanted to improve her memory
- Numerous herbs can affect warfarin and the INR

65

Drug Interactions

- Drug interactions involving warfarin are characterized as either pharmacokinetic or pharmacodynamic in nature
  - Pharmacokinetic interactions cause changes in systemic concentrations of warfarin by interfering with 1 or more of the following: absorption, protein binding, metabolism

66

Herbs and their Anticoagulant Effects

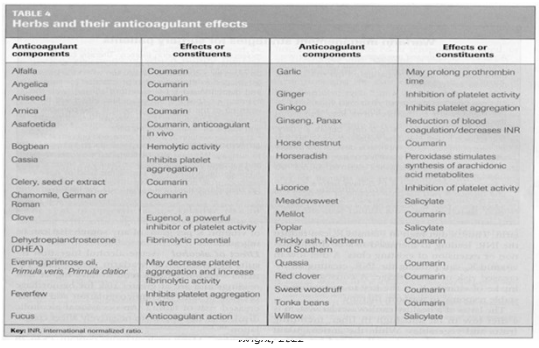


TABLE 4
Herbs and their anticoagulant effects

Anticoagulant components	Effects or constituents	Anticoagulant components	Effects or constituents
Alfalfa	Coumarin	Garlic	May prolong prothrombin time
Angelica	Coumarin	Ginger	Inhibition of platelet activity
Aniseed	Coumarin	Ginkgo	Inhibits platelet aggregation
Arnica	Coumarin	Ginseng, Panax	Reduction of blood coagulation/decreases INR
Asafoetida	Coumarin, anticoagulant in vivo	Horse chestnut	Coumarin
Bogbean	Hemolytic activity	Horseradish	Peroxidase stimulates synthesis of arachidonic acid metabolites
Cassia	Inhibits platelet aggregation	Licorice	Inhibition of platelet activity
Celery, seed or extract	Coumarin	Meadowsweet	Salicylate
Chamomile, German or Roman	Coumarin	Melilot	Coumarin
Clove	Eugenol, a powerful inhibitor of platelet activity	Poplar	Salicylate
Dehydroepiandrosterone (DHEA)	Fibrinolytic potential	Prickly ash, Northern and Southern	Coumarin
Evening primrose oil, *Primula veris, Primula clatior*	May decrease platelet aggregation and increase fibrinolytic activity	Quassia	Coumarin
Feverfew	Inhibits platelet aggregation in vitro	Red clover	Coumarin
Fucus	Anticoagulant action	Sweet woodruff	Coumarin
		Tonka beans	Coumarin
		Willow	Salicylate

Key: INR, international normalized ratio.

Wright, 2022

67

Herb-Drug Interactions

Table 4. Possible Herb-Drug Interactions.

Herbal agent	Interacting drugs	Clinical effect
Danshen (*Salvia miltiorrhiza*)	Warfarin	Bleeding
Dong quai	Warfarin	Bleeding
Ephedra	Caffeine, decongestants	Sympathomimetic toxidrome (hypertension, tachycardia, CNS, CVS stimulation)
Garlic	Warfarin	Lowers blood levels
	Chlorpropamide	Hypoglycemia
Ginkgo biloba	Aspirin, clopidogrel, dipyridamole, ticlopidine, warfarin, heparin	Bleeding
	Thiazide diuretic	Elevated blood pressure
	Trazodone	Coma
	Morphine	Lack of effect
Ginseng	Warfarin, ethanol	Lowers blood levels
	Phenelzine	Induces mania
Kava	Benzodiazepines, sedative-hypnotics	CNS depression
	Levodopa	Increased "off" periods
St. John's wort	Antidepressants	Serotonergic stimulation (theoretical)
	Cyclosporin	Decreased effect (cytochrome p450 inducer)
	Digoxin	Decreased serum level
Valerian	Anxiolytics	CNS sedation

www.ebmedicine.net accessed 1-22-2015
Wright, 2022

68

Various Medications Can Also Affect INR

- Increases anticoagulant effect
  - Acetaminophen
  - Beta-blockers
  - Ketoconazole
  - Thyroid hormones
  - Lovastatin
  - Metronidazole
- Decreases anticoagulant effect
  - Dicloxacillin
  - Trazodone
  - Estrogens
  - Thiazide diuretics

Wright, 2022

69

So…We Then

- Eliminated the garlic and ginkgo and held 1 dose of warfarin
- Rechecked INR in 48 hours
  - Within 48 hours, it had decreased to 3.7
  - Another dose of warfarin held and INR rechecked in 48 hours
    - INR now: 3.1

Wright, 2022

70

68 year old female

- Long-standing history of A. fib, currently on warfarin
  - INR: 2.5-2.8 x years
- Diagnosed with COVID -19 and sought care from her naturopath
- Presents 7 days after diagnosis with severe headache
  - Stat INR: 12.2
- CT confirms large cerebral bleed – admitted to neuro ICU
- What medication was she given by her naturopath?

Wright, 2022

71

CYP450 Isoenzyme Inhibition by the SSRIs *(in vitro*)*

	CYP Isoenzymes				
	1A2	2C9	2C19	2D6	3A4
Sertraline	+	+	+ to ++	+	+
Escitalopram	0	0	0	0	0
Citalopram	+	0	0	+	0
Fluoxetine	+	++	+ to ++	+++	++
Paroxetine	+	+	+	+++	+

0 = minimal or weak inhibition; +, ++, +++ = mild, moderate, or strong inhibition

* Clinical significance of *in vitro* data is unknown

There are limited *in vivo* data suggesting a modest CYP 2D6 inhibitory effect for escitalopram 20 mg/day.

von Moltke et al., 2001; Greenblatt et al., 2002; Greenblatt et al., 1998

72

Additional Concerns

- Trimethoprim/sulfamethoxazole with glyburide
  - hypoglycemia
- Clarithromycin with digoxin
  - digoxin toxicity
- Potassium sparing diuretics with ACE inhibitors
  - hyperkalemia

Wright, 2022

73

Macrolides

- Known QT prolongation
- Caution with other drugs which have similar potential:
  - Tricyclic antidepressants
  - Fluoroquinolones
  - Antipsychotics
  - Antiarrhythmics

Wright, 2022

74

Important Interactions in the Elderly

TABLE: IMPORTANT DRUG INTERACTIONS IN THE ELDERLY

Drug-Drug Interaction	Observed Adverse Outcome
ACE inhibitors + K-sparing diuretics	Hospitalization for hyperkalemia
ACE inhibitors + co-trimoxazole	Hospitalization for hyperkalemia
Benzodiazepines + CYP3A4 inhibitors	Hospitalization for hip fracture
Calcium channel blockers + macrolides	Hospitalization for hypotension or shock
Digoxin + macrolides	Hospitalization for digoxin toxicity
Lithium + ACE inhibitors, loop diuretics	Hospitalization for lithium toxicity
Phenytoin + co-trimoxazole	Hospitalization for phenytoin toxicity
Glipizide or glyburide + CYP2C9 inhibitors	Hospitalization for hypoglycemia
Tamoxifen + paroxetine	Death from breast cancer
Theophylline + ciprofloxacin	Hospitalization for theophylline toxicity
Warfarin + co-trimoxazole or fluconazole	Hospitalization for GI bleeding
Warfarin + NSAIDs	Hospitalization for GI bleeding

ACE = angiotensin-converting enzyme; CYP = cytochrome P450; GI = gastrointestinal; K = potassium; NSAIDs = nonsteroidal anti-inflammatory drugs.
Adapted from reference 1.

http://www.pharmacytimes.com/publications/issue/2012/May2012/Which-Drug-Interactions-Matter-in-Older-Adults accessed 01-21-2015

Wright, 2022

75

Other Areas of Risk

- Case in NH
- NP wrote RX for mometasone for eczema; large tube with 5 refills
- Refilled 6 months later
- Patient sued; had been using the steroid cream as a moisturizer
- Developed striae over lower extremities
- What could have been done differently?

76

Techniques to Avoid Errors

- Clear writing and documentation
- EHR, if available
- Double check dosages
- Avoid writing RX's when patient is talking to you or sitting in front of you
- Have a list of high risk drugs; when you see this list – bells should go off in your head
- Double check interactions

77

Use a Drug Data Base

- Epocrates
- Lexi-comp
- WebMD
- EHR drug data base
  - Be weary of EHR fatigue
  - Be alert to the warnings

78

Warn Patient of Side Effects

- Psychiatrist prescribed a medication which called for a warning to avoid driving or operating heavy machinery
- Failed to provide the warning to the patient
- Patient took the medication, drove and caused an accident which injured a third party
- Third party sued the psychiatrist for malpractice and won

(Buppert, C. Nurse Practitioner's Business Practice and Legal Guide; 1999)

79

Discontinue a Medication When It Causes a Cautioned Side Effect

- Physician prescribed OCP's for a patient
- She developed migraines
- Called physician who advised her that she could continue the pills
- She suffered a stroke

(Buppert, C. Nurse Practitioner's Business Practice and Legal Guide; 1999)

80

Don't Contribute to Substance Abuse

- Patients have sued providers for contributing to a substance abuse problem
- Consult with other specialist's regarding long-term narcotic prescriptions

81

Documentation

Wright, 2022

82

Documentation

- Documentation is crucial at a malpractice trial
- It provides a record of the quality of care you provided
- Lack of documentation can make you vulnerable to a malpractice claim

Wright, 2022

83

Poor Documentation is Dangerous

- Notes and prescriptions must be legible
  - Cardiologist wrote prescription for Isordil. Pharmacist read it as Plendil and filled the prescription. Patient died as a result
  - Settlement: $225,000 from cardiologist and $225,000 from pharmacist

Wright, 2022

84

Document All

- No shows
- Canceled appointments
- Telephone calls made to a patient to check on him/her
- Letters sent and calls made to remind patient of a particular test needing to be done
  - Keep copies in chart of these letters

85

Non-Adherence

- Always document discussions trying to get the patient to improve adherence
- Document the patient's verbal responses

86

Examples of Things NOT to Write in the Chart

- COM (Crotchety old man)
- FLK (Funny looking kid)
- FLK from FLP (Funny looking kid from funny looking parents)
- Two hands stamped on the chart (Treat with kid gloves)
- FFC (Fit for coffin)
- 29 year old well-endowed beautiful young woman
- T/T = 2/3

87

Document a Patient's Refusal of Care

- Document that you have explained the risks, benefits and alternatives of treatment
- Also discuss and document the risks of refusing treatment

88

Why Do People File Malpractice Claims?

89

Reasons for Malpractice Claims

- Reasons for Malpractice Claims
  - Expectation: Expect better outcome
  - Investigation: Want to see if anyone is at fault
  - Blame: Someone else's fault
  - Retribution: Punish nurse
  - Remuneration: Money
  - Institutionalization: Punish the system

90

The Research Is Clear

- The relationship we have with a patient is our biggest risk and our biggest protection
  - Effective communication is a important way to prevent a claim

91

Customer Service: Little Things Can Make a Big Difference

This Is Your Biggest Protection

92

Let Me Give You Some Examples

- Beckman and colleagues studied 45 depositions and focused on why plaintiffs decided to bring malpractice actions
  - Determined that – it was the process of care, rather than the bad outcomes which determined the decision to file a claim
  - 71% of depositions revealed problems with MD-patient communication

http://www.medscape.com/viewarticle/507227; accessed 07-2-2010

93

Claims Against Surgeons Focused On Four Issues

- 1. Perceived unavailability (no one returned our calls, no one came when I rang)
- 2. Devaluing the patient's or family's views (cultural insensitivity)
- 3. Poor delivery of medical information (failure to explain why a complication happened)
- 4. Failure to understand the patient's perspective

http://www.medscape.com/viewarticle/507227; accessed 07-02-2010

94

Compare This With…

- Primary Care Clinicians who have never had a claim tended to:
  - Educate patients about what to expect
  - Used humor more
  - Employed better communication techniques to make sure patients understood and communicated with them
  - Spent an average of 3.3 minutes longer with the patient

http://www.medscape.com/viewarticle/507227; accessed 07-02-2010

95

Remember What I Said When I Started Today:

Happy Patients Do **NOT** Sue



Angry Ones Do!!!!

96

In Summary…

- How do you protect yourself?
  - 4 C's
    - Caring
    - Communication
    - Competence
    - Charting

97

Thank You

I Would Be Happy To Entertain Any Questions



98

Wendy L. Wright
Adult/Family Nurse Practitioner

Wright & Associates Family Healthcare
WendyARNP@aol.com

99