# Oral antibiotics important interactions

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## ORAL CEPHALOSPORINS

Using cefixime together with lactobacillus acidophilus may decrease the effects of lactobacillus acidophilus when these medications are taken at the same time. To prevent or minimize the interaction, lactobacillus acidophilus should be administered at least 1 to 2 hours before or after cefixime

## ORAL CEPHALOSPORINS

MAJOR INTERACTIONS >

## ORAL CEPHALOSPORINS

may reduce the effects of **estradiol** in some women. If you are using estradiol for birth control, you may be at increased risk for pregnancy or breakthrough bleeding

## mycophenolate mofetil

Cefixime may reduce the blood levels and effects of mycophenolate mofetil. You may need a dose adjustment of mycophenolate mofetil or more frequent monitoring to use both medications together.

## alcohol/food

No alcohol/food interactions were found >

# There are 4 disease interactions with ORAL CEPHALOSPORINS.

## diarrhea

Clostridioides difficile-associated diarrhea

#### liver disease

Cases of hepatitis have been reported with the use of certain cephalosporins. Transient rise in AST, ALT, and alkaline phosphatase levels have also been observed. Caution and monitoring is recommended when these agents are prescribed to patients with hepatic disorders.

## renal dysfunction:

- The serum concentrations of beta-lactam antibiotics and their metabolites may be increased and the half-lives prolonged in patients with impaired renal function.
  - Dosage adjustments may be necessary >
- Renal function tests should be performed periodically during prolonged and/or high-dose therapy

#### seizure disorders

Cephalosporins have been implicated in triggering > seizures.

Nonconvulsive status epilepticus (NCSE), encephalopathy, coma, asterixis, neuromuscular excitability, and myoclonia have been reported with cephalosporins particularly in patients with a history of epilepsy and/or when recommended dosages of cephalosporins were exceeded due to renal impairment.

Adjust dosing based on creatinine clearance. Anticonvulsant therapy should be continued in patients with known seizure disorders. If CNS adverse reactions including seizures occur, patients should undergo a neurological evaluation to determine whether treatment should be discontinued

## MODERATE IMPORTANT INTERACTIONS

#### gentamicin cefixime: >

Gentamicin can sometimes cause kidney damage, and using it with a cephalosporin antibiotic like cefixime may increase that risk Signs and symptoms of kidney damage may include nausea, vomiting, loss of appetite, increased or decreased urination, sudden weight gain or weight loss, fluid retention, swelling, shortness of breath, muscle cramps, tiredness, weakness, dizziness, confusion, and irregular heart rhythm

- cefixime vancomycin >
- may increase the risk of kidney and/or nerve barbare.

#### warfarin cefixime

- Cefixime may increase the effects of warfarin and cause you to bleed more easily.
  - may need more frequent monitoring of INR after starting cefixime or whenever it is discontinued, and appropriate adjustments made in your blood thinner dosage if necessary.

#### furosemide cefixime

Cephalosporin antibiotics like cefixime can occasionally cause kidney problems, and using it with furosemide may increase that risk.

The interaction is more likely to occur when the cephalosporin is given at high dosages by injection into the vein or when it is given to the elderly or individuals with preexisting kidney function impairment.

## **AZITHROMYCIN**

- **79 major** drug interactions
- 240 moderate drug interactions >

## Major interactions

- Amiodarone >
- May cause arrythmia, amio level may increase, pneumonitis
  - cholera vaccine, live
    - <u>Cisapride</u> >
      - Long QT >
    - <u>Citalopram</u> >
  - May cause arrythmia
    - **Colchicine** >
- MAY INCREASE COL LEVEL(GI, MUSCULAR, NERVIOUS SYSTEM)

- Haloperidol and many other antipsychotics >
  - May cause arrythmia
- Hydroxychloroquine and other anti malaria drugs
  - May cause arrythmia
    - <u>Morphine</u> >
  - MAY INREASE THE BLOOD LEVEL OF MORPHINE
    - Moxifloxacin and other new QNs >
      - May cause arrythmia
      - mycophenolate mofetil >

- Many monoclonal abs
  - Many anti HIV drugs >

## Azithromycin disease interactions

Clostridioides difficile-associated diarrhea

## liver and/or biliary disease.

Azithromycin is contraindicated in patients with a history of cholestatic jaundice/hepatic dysfunction associated with prior use of azithromycin. Azithromycin is primarily eliminated by biliary excretion; however, the pharmacokinetics of azithromycin have not been established in patients with liver dysfunction. Therapy with azithromycin should be administered cautiously in patients with liver and/or biliary disease. Abnormal liver function, hepatitis, cholestatic jaundice, hepatic necrosis, and hepatic failure have been reported, with some fatal cases. Treatment should be discontinued immediately if signs/symptoms of hepatitis occur.

## QT prolongation

Prolonged cardiac repolarization and QT interval have been reported in patients receiving treatment with azithromycin. Providers should consider the risk of QT prolongation, which can be fatal, when weighing the risks and benefits of azithromycin for at-risk patients including: patients with known prolongation of the QT interval, history of torsades de pointes, congenital long QT syndrome, bradyarrhythmias, or uncompensated heart failure; patients with ongoing proarrhythmic conditions such as uncorrected hypokalemia or hypomagnesemia, clinically significant bradycardia, or receiving other drugs that prolong the QT interval.

## myasthenic syndrome

The use of macrolide antibiotics has been reported to exacerbate symptoms of myasthenia gravis and trigger new onset of symptoms of myasthenic syndrome. Therapy with these agents should be administered cautiously in patients with a history of myasthenia gravis.

## Amoxicillin Drug Interactions

## Major interactions

- <u>bcq</u> ▶
- cholera vaccine, live
  - Methotrexate >
- MAY INCREASE THE LEVEL OF MET. >
  - mycophenolate mofetil >
    - typhoid vaccine, live >

## Amoxicillin disease interactions

- colitis >
- mononucleosis >
  - Diabetes >
- HIGH LEVEL OF DRUG MAY CAYSE FALSE POSITIVE GLUCOSE LEVEL IN THE URINE BY SOME METHODES
  - <u>PKU</u> ▶
  - SOME PRODUCTS MAY HAVE PHE
    - <u>renal dysfunction</u> >
      - <u>Hemodialysis</u> >
    - SUPP DOSE MAY BE NEEDED >

## Various types of diarrhea

Clostridioides difficile-associated diarrhea

# Amoxicillin/clavulanate Drug Interactions

- SOME LIVE ATT. VACCINES >
  - KETOCONAZOLE >
    - LIVER INJURY >
    - METOTRAXATE >
  - SOME MONOCLONAL AB
    - mycophenolate mofetil >

here are 7 disease interactions with amoxicillin / clavulanate which include:

LIKE AMOXICILLIN >

