ANTIBIOTICS FOR TREATMENT OF TRAVELER’S DIARRHEA

1. **CIPRO (Ciprofloxacin)**

   **Dose**
   
   ➢ Cipro 500 mg. For severe diarrhea only. One tablet every 12 hours for 1-3 days or until diarrhea is gone.

   **Possible Side Effects of Cipro**
   
   ➢ Nausea, vomiting, diarrhea, dizziness, headache, rash, fever, depression, candidiasis (yeast infection), photosensitivity.
   ➢ Rarely, confusion, drowsiness, seizures, anaphylaxis.

   **Contraindications to Cipro**
   
   ➢ Hypersensitivity reaction with past doses of Quinolines (i.e., Cipro, Floxin, Cinobac, Noroxin, Maxaquin, Penetrex).
   ➢ Avoid use with Theophylline (increased Theophylline levels when used with Cipro).

   **Special Precautions**
   
   ➢ Avoid use in pregnant or lactating women, children, those with renal disease, or epilepsy.
   ➢ Avoid taking any products containing magnesium or calcium (such as antacids), iron, or aluminum within 2 hours of taking Cipro. These products could cause decreased absorption of Cipro.
   ➢ Due to possible photosensitivty, avoid sunlight or use sunscreen to prevent burns.
   ➢ Contact physician immediately if adverse reactions occur.
   ➢ If you are using an oral contraceptive, an additional form of birth control should be used due to decreased effectiveness of oral contraceptives when taken with antibiotics.
   ➢ Drink plenty of fluids while taking this drug.
   ➢ Increased serum levels of Cipro when used with Probenecid. If taking Probenecid, notify your doctor.
   ➢ May be taken with or without food; preferably taken 2 hours after a meal. Also, avoid taking with dairy products.
   ➢ Cipro may increase effects of oral anticoagulant warfarin (coagulation levels should be closely monitored); and caffeine.
   ➢ Rarely, Cipro with certain antidiabetic (glyburides) may cause hypoglycemia.
   ➢ If taking other medications, particularly probenecid, dilantin, coumadin, and certain diabetes drugs, discuss with your doctor before leaving on trip. This drug can change metabolism of other medications.

2. **ZITHROMAX (Azithromycin)**

   ➢ Capsule should be taken 1 hour before or 2 hours after a meal. Do not mix with food.
   ➢ Do not take aluminum or magnesium containing antacids simultaneously with Azithromycin.

   **Possible Side Effects of Zithromax**
   
   ➢ Diarrhea, abdominal pain, nausea, vomiting, dyspepsia, vaginitis, loss of appetite.
   ➢ In less than 1%: palpitations, chest pain, vomiting, flatulence, dyspepsia, melena, monilia, vaginitis, nephritis, dizziness, headache, vertigo, somnolence, fatigue, photosensitivity, rash, angioedema, hives.

   **Contraindications to Zithromax**
   
   ➢ Zithromax is contraindicated in patients with known hypersensitivity to azithromycin, erythromycin, or any other macrolide antibiotic.
   ➢ Pregnant or nursing mothers
   ➢ Patient is on theophylline
   ➢ Patient is on warfarin
   ➢ Patient traveling is on digoxin or triazolam
**Special Precautions**
- Check with a pharmacy or your physician for any drug interactions involving drugs you are on and with azithromycin.
- Notify a doctor if you develop yellowing of your eyes or skin, dark urine, or clay colored stools.
- If you have an allergic reaction to this drug seek medical attention. Allergic reaction includes: rash, itching, swelling, dizziness, trouble breathing.
- Using this medication for prolonged or repeated periods may result in a secondary infection (oral, balder, or vaginal yeast infection).
- Used with caution with patients who have a history of liver dysfunction or renal impairment.

**Warnings**
- Rare serious allergic reactions including angioedema and anaphylaxis. Despite initially successful symptomatic treatment of allergic symptoms, when symptomatic therapy was discontinued the allergic symptoms recurred thereafter in some patients without further azithromycin exposure.
- Pseudomembranous colitis has been reported with nearly all antibiotics and could be life threatening.

3. **BACTRIM DS (SEPTRA DS)/(TMP/SMX)**

**Dose**
- One tablet 2 times daily for 5 days. Patients need to maintain adequate fluid intake to prevent crystals and stone formation.

**Possible Side Effects of Bactrim**
- Nausea, vomiting, dizziness, diarrhea, abdominal pain, chills, headache, fever, skin rash, photosensitivity.
- Rarely, liver, kidney or cardiac problems; bruising or bleeding or anaphylaxis.

**Contraindications to Bactrim:**
- Hypersensitivity to trimethoprim or sulfonamides, or to Celebrex or thiazide diuretics.
- Previous known allergic reactions to TMP (Bactrim)
- Pregnant and nursing mothers.
- Patients with marked hepatic or severe renal insufficiency.
- Megablastic anemia due to folate deficiency.
- In patients less than 2 months old

**Special Precautions**
- Patient traveling receiving anticonvulsant therapy, patient with deficient glucose-6-phosphate dehydrogenase
- Avoid use in pregnant women, those with renal disease, bronchial asthma, or liver problems and the elderly.
- Avoid sunlight or use sunscreen to avoid burns.
- Avoid over-the-counter drugs (aspirin, vitamin C) unless directed by physician.
- Be aware that an increased hypoglycemic response may occur.
- A false positive urinary glucose test may occur; if diabetic, use Clinistix or Tes-Tape.
- If you are using an oral contraceptive, an additional form of birth control should be used due to the decreased effectiveness of oral contraceptives when taken with antibiotics.
- Take with water; drink 8-10 glasses of water per day.
- Medication should be stopped at the first appearance of skin rash or any adverse reactions and seek medical attention.
- Contact physician immediately if adverse reactions occur.
- Increased effects of Dilantin, Digoxin, and oral anticoagulants.
- Low platelet count may occur when taken with certain diuretics, primarily thiazides.
- Bactrim can displace methotrexate, increasing free methotrexate.
- Caution with patients who have porphyria and thyroid dysfunction.
There have been reports of nephrotoxicity with co administration of Bactrim and cyclosporine in renal transplant patients.
The efficiency of tricyclic antidepressants can decrease when co administered with Bactrim.

**Warnings**
- Rarely this medication can cause serious, even fatal side effects such as a severe, peeling skin rash known as Stevens-Johnson syndrome.
- Stop this drug and notify physician immediately if you develop any of the following symptoms: skin rash or blisters, unusual fatigue, persistent sore throat and fever, yellowing eyes or skin, dark urine or abdominal pain.
- If any allergic reaction occurs, seek immediate medical attention. Symptoms may also include: rash, itching, swelling, dizziness, and breathing trouble.

4. **DOXYCYCLINE**

**Dose**
- Doxycycline 100 mg. One tablet 2 times a day for 5 days.

**Contraindications to doxycycline**
- Anticoagulants (blood thinners) (doxycycline increases the effect of anticoagulants)
- Hypersensitivity to past doses of tetracycline
- Pregnancy and nursing mothers

**Possible Side Effects of doxycycline**
Nausea, vomiting, esophagitis, diarrhea, abdominal cramps, headache, fever, skin rash, sore throat, photosensitivity, yeast infections.

**Decreased effects of Doxycycline when used with:**
- antacids
- Pepto-Bismol
- barbiturates
- carbamazepine
- iron products
- Dilantin
- Kaolin-Pectin (Kaopectate)
- Tagamet
- sodium bicarbonate

**Special Precautions**
- Avoid use in those with hepatic (liver) disease, children, and with lactating women.
- Avoid sun exposure since burns may occur; sunscreen should include UVA protection.
- Avoid use of Clinistix or Tes-Tape for urine if diabetic since this drug may cause a false negative test.
- Decreased effects of penicillins and oral contraceptives when used with Doxycycline. If you are using an oral contraceptive, an additional form of birth control should be used.
- Should be taken with large glass of water or food.
- Contact physician immediately if adverse reactions occur.

Sources: 2001 Physicians Desk Referance

Questions or side effect reporting: Call Olin Health Center Travel Clinic at 353-3161 or call your personal health care provider, or visit our website at: www.msu.edu/~travel.