

Nutrition and Pharmacology Enhancement

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Rivastigmine (Exelon)



Rivastigmine



Rivastigmine (Exelon)

Drug Category - Acetylcholinesterase Inhibitor

Foods that Interact - Potatoes, tomatoes, and eggplants

Rationales (pathophysiology) - Alzheimer's Disease is a progressive, incurable, dementia-type illness that is characterized by neurodegenerative effects that leaves the patient with cognitive dysfunction and memory loss.

Signs and Symptoms - Memory lapses, irritability, difficulty controlling bowel movements, difficulty concentrating, personality and behavioral changes, misplacing objects, and the inability to recall personal information

Rivastigmine (Exelon)

Patient Experience - Patients who suffer from this disease are experiencing memory loss and personality change-type symptoms.

Main Details of the Experience - (Discuss) ADL's, ambulation, vital signs, medication compliance, side effects, and mental status changes

Known factors that contributed to this occurrence - Risk factors: age, genetics, environmental, and lifestyle habits

Educational Interventions - Educational handouts, pamphlets, and use the teach-back method to ensure information retention

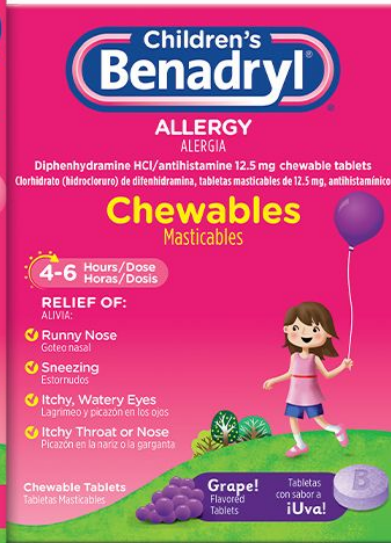
Rivastigmine (Exelon)

Knowledge Needed - Purpose, side effects, life threatening reactions, how to take medication, and assistance during ADL's

Possible Techniques for Implementation - Remove obstacles, provide ambulation belt, rise slowly when changing positions, report GI upset, have a sitter for self-care and safety

Community Resource that can help prevent future complications -
Alzheimer's Association

Diphenhydramine (Benadryl)



Use only as directed.

Diphenhydramine (Benadryl)

ALLERGY SYMPTOMS



Drug Category - Antihistamine

Foods that Interact - Alcohol, fermented foods, shellfish, legumes and aged cheese.

Rationales (pathophysiology) - Histamines are released within the body whenever they encounter an allergen they need to defend the body from. This medication is used to antagonize the effects of histamine within the body to treat symptoms related to allergies, the common cold, and hay fever

Signs and Symptoms - Common cold and allergic rhinitis: Runny nose, rash, and itchy eyes. Side effects: drowsiness, dizziness, headache, weakness, agitation, insomnia, fatigue, ataxia, urinary retention, blurred vision, dry mouth, rash, hypotension, abdominal pain, restlessness, confusion, diarrhea, and constipation

Diphenhydramine (Benadryl)

Patient Experience - Experience rhinorrhea, nasal congestion, cough, and increased mucosal secretions

Main Details of the Experience - Vitals and mental status will need to be monitored. Patients won't be able to drive or operate heavy machinery

Known factors that contributes to the occurrence - Being a child, having asthma, or having a family member with asthma or eczema

Educational Interventions - Educate the patient on allergy testing, how to avoid allergens, benefits of Benadryl, signs and symptoms of allergic rhinitis and anaphylaxis

Diphenhydramine (Benadryl)

Knowledge Needed - Information about anaphylaxis/how to recognize, proper knowledge about Benadryl and how to obtain it, and activities to avoid

Possible Techniques for Implementation - Education handouts with pictures, diagrams, and offer to assist with the coordination of an allergist for help

Community Resources that can help prevent future complications - Food Allergy Research and Education (FARE)

Azithromycin (Zithromax)



Azithromycin (Zithromax)

Drug Category - macrolide antibiotics

Foods that Interact - aluminum or magnesium-containing antacids, warfarin, and nelfinavir, alcohol not recommended

Rationales (pathophysiology) - Used to treat bacterial infections (STDs, pneumonia, ear infections, skin infections) or GI infections (*H. pylori*, traveler's diarrhea). This medication stops the growth of bacteria and does not work for viral infections. It is the choice of drug for patients allergic to penicillin.

Signs and Symptoms - Nausea, vomiting, diarrhea, stomach pain or abdominal cramps, fever, fatigue, dyspepsia, headache, photosensitivity, rash, irregular/fast heart rate, liver damage

Azithromycin (Zithromax)



Patient Experience - This drug may cause GI distress in some patients

Main Details of the Experience - Abdominal cramps, diarrhea, nausea, dyspepsia are common side effects from the drug

Known factors that contributes to the occurrence - These symptoms may be caused by not eating with the medication. Also, patients may double a dose to make up for a skipped dose.

Educational Interventions - Drug is better tolerated with food, eat a yogurt with live cultures to prevent UTIs, if an antacid is needed take 2 hours before or 2 hours after medication is administered, finish out the medication

- i. ERYTHROMYCIN
- ii. CLARITHROMYCIN
- iii. AZITHROMYCIN
- iv. ROXITHROMYCIN
- v. SPIRAMYCIN

Azithromycin (Zithromax)

Knowledge Needed - using antibiotics when they are not needed increase the risk for an infection that is resistant to antibiotic tx, allergies to any macrolide drugs, do not take if patient has experienced jaundice while taking drug previously, do not let anyone else take this medication

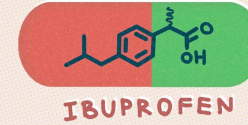
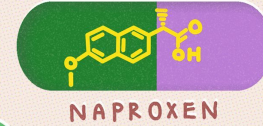
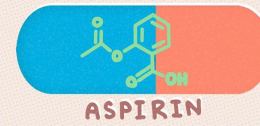
Possible Techniques for Implementation - set an alarm or reminder to take medication, take it around the same time each day

Community Resources that can help prevent future complications - STD education within school systems, clean water availability

Aspirin (acetylsalicylic acid)



Aspirin (acetylsalicylic acid)



Drug Category - salicylates, NSAID

Foods that Interact - caffeine (minor), alcohol (increase risk of GI bleed)

Rationales (pathophysiology) - Relieves symptoms of rheumatoid arthritis and osteoarthritis, Reduces fever and mild to moderate pain, lowers risk of heart attacks, prevents ischemic strokes, lowers risk of blood clots. This drug works to prevent fever, pain, swelling, and blood clots. Aspirin blocks the effects of COX-1 and COX-2 enzymes which prevents synthesis of prostaglandins.

Signs and Symptoms - nausea, vomiting, stomach pain, heartburn, rash, hoarseness, increased HR and RR, cold and clammy skin, loss of hearing, tinnitus, GI bleed

Aspirin (acetylsalicylic acid)

Patient Experience - patient may take aspirin once daily to lower risk of heart attack or stroke

Main Details of the Experience - patients taking aspirin may experience heartburn and stomach pain or irritation, however, most side effects are rare at low doses

Known factors that contributes to the occurrence - taking other NSAIDs with aspirin, taking aspirin on an empty stomach

Educational Interventions - teach patient signs of salicylism (decreased hearing and tinnitus), DO NOT take ibuprofen or other NSAIDs to treat pain or fever without an appropriate amount of time to pass between both doses, 10% of patients with Asthma may experience asthma attacks after taking aspirin

Aspirin (acetylsalicylic acid)

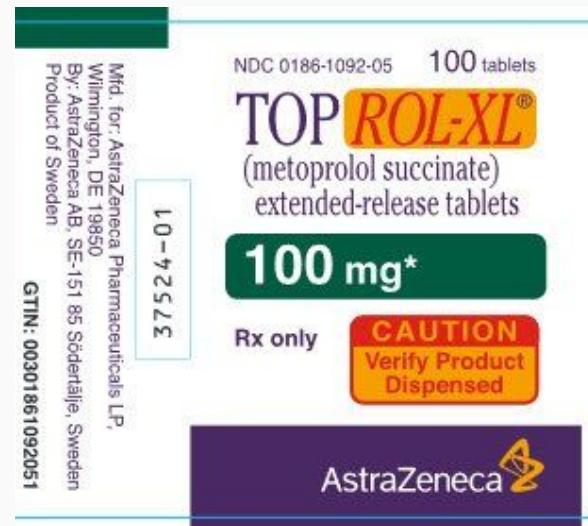


Knowledge Needed - medication will prolong bleeding time, teach patient symptoms of GI toxicity and GI bleed, pregnant women should not take. Interacts with ACE inhibitors, corticosteroids, beta blockers, furosemide, NSAIDs, warfarin.

Possible Techniques for Implementation - take medication around same time each day, place medication in a spot where patient will see it and remember to take it, set a reminder to take medication

Community Resources that can help prevent future complications - Exercise classes for people in all stages of life with various health conditions

Metoprolol (Toprol XL, Lopressor)



Metoprolol (Toprol XL, Lopressor)



Drug Category - beta blockers

Foods that Interact - alcohol (increased dizziness), caffeine (decreased effectiveness), multivitamins or minerals (decreased effectiveness), avoid potassium rich foods (meat, milk, bananas, sweet potatoes) because metoprolol increases level of potassium in blood

Rationales (pathophysiology) - Used to treat severe angina, high blood pressure, and heart failure. It works by relaxing blood vessels and slowing heart rate to lower blood pressure and improve blood flow. Metoprolol blocks the effects of epinephrine on beta-1 receptors and blocks beta-2 receptors within the lungs and airways.

Signs and Symptoms - dizziness, lightheadedness, fatigue, depression, nausea, vomiting, stomach pain, constipation, dry mouth, heartburn, gas or bloating, rash, cold hands and feet, runny nose, peripheral edema, weight gain, syncope, rapid/pounding/irregular heart rate

Metoprolol (Toprol XL, Lopressor)



Patient Experience - patient may experience increased dizziness or orthostatic hypotension

Main Details of the Experience - caused by a low blood pressure

Known factors that contributes to the occurrence - taking medication when blood pressure is already low, sitting/standing up too quickly

Educational Interventions - take medication at the same time each day (with or immediately following meals), do not stop medication suddenly, do not double up a dose, it is recommended to take blood pressure before administering metoprolol

Metoprolol (Toprol XL, Lopressor)

Knowledge Needed - If patient is diabetic, metoprolol may reduce symptoms of hypoglycemia. Lifestyle changes should be made in addition to drug therapy (low-sodium, low-fat diet, healthy weight, exercise). If patient has asthma, do not take beta blockers. Drug interactions: antihistamines, antimalarial agents, indigestion and heartburn medications (cimetidine, ranitidine), heart medications (digoxin, amiodarone, verapamil)

Possible Techniques for Implementation - encourage and diet changes with resources provided, monitor blood glucose levels frequently, talk to provider about other options for medications that interact with metoprolol if needed

Community Resources that can help prevent future complications - exercise classes, nutrition courses, community gardens

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