NU641 Case Study Week 7 - Upper Respiratory Infections

Jackie is a 45-year-old white female with past medical history of controlled hypertension, controlled asthma, and eczema. She has a four-day history of nasal congestion, headache, sore

throat, sneezing, and productive cough. She denies fever, nausea, vomiting, and myalgias. She has three children who recently went back to school following a summer vacation. No one else in her household is currently presenting with similar symptoms. She has no known drug allergies but is allergic to mums and ragweed. She calls her primary care provider’s office requesting a medication to treat her illness. She takes several medications, including the following:

• Mometasone 220 mcg—1 puff daily for asthma.

• Albuterol 90 mcg—1 to 2 puffs q4–6 hours as needed for shortness of breath.

• Lisinopril 10 mg—one tablet by mouth daily for hypertension.

• Oxymetazoline hydrochloride 0.05% nasal spray—2 sprays per nostril bid × 3 days.

Provide rationales for your answers:

1. Which of the following is the MOST appropriate drug to recommend?

a. Oxymetazoline hydrochloride 0.05% nasal spray— 2 sprays per nostril bid until symptoms resolve.

b. Naproxen 220 mg—one tablet by mouth every 12 hours as needed until symptoms resolve.

c. Dextromethorphan ER oral liquid—60 mg every 12 hours until symptoms resolve.

d. Amoxicillin–clavulanic acid 500 mg every 8 hours for seven days.

2. Which of the following nonpharmacological therapies is NOT recommended?

a. Steam inhalation

b. Increased water intake

c. Menthol lozenges

d. Saline gargle

3. Jackie is insistent on taking a complementary therapy to help treat her symptoms. What is the MOST appropriate recommendation?

a. *Echinacea purpurea* tincture—0.75 mL

b. Fresh garlic—3 cloves

c. Acidophilus probiotic—1 tablet daily

d. Vitamin C—1 g