



Script Notes

The Pharmacy and Therapeutics Newsletter for Keystone Mercy Health Plan Participating Providers

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We welcome your thoughts, comments and/or suggestions.

Do you have an idea for a story?
Is there information we can provide to help you?

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Treatment of Community-Acquired Pneumonia

Community-acquired pneumonia (CAP) is a common but serious respiratory disease. It is estimated that 5.6 million cases of CAP occur annually and as many as 1.1 million of these cases require hospitalization. Pneumonia is the most common cause of death from infectious disease and the sixth most common cause of death overall. Since CAP can be potentially fatal, early appropriate antibiotic treatment is necessary.

Treatment for CAP is based on four groups. (Please refer to the insert in this edition of *Script Notes*.) Each group has a list of likely pathogens and suggested empiric therapy. Patients are stratified into one of these four groups based on the place of therapy (outpatient, inpatient ward or intensive care unit), the presence of cardiopulmonary disease, and their presence of “modifying factors,” which include risk factors for drug-resistant *Streptococcus pneumoniae* (DRSP), enteric gram-negatives, and *Pseudomonas aeruginosa*. Patients should initially be treated empirically, based on the likely pathogen(s) listed in one of the four patient groups. When culture results become available, organism-specific therapy may be possible for some patients. The duration of therapy for CAP is generally seven to 14 days.

Most patients with CAP will have an adequate clinical response within three days, and if the patient has met appropriate criteria, switching to oral therapy should be done. Criteria for IV to PO conversion include improvement in cough and dyspnea; afebrile (<100°F) on two occasions 8 hours apart; white blood cell count decreasing; and functioning gastrointestinal tract with adequate oral intake. Even a patient who is febrile can be converted to oral therapy, if other clinical features are favorable. A patient can be discharged on the same day he/she began oral therapy if other medical and social factors permit. Antibiotic agents that achieve comparable serum levels either intravenously or orally include doxycycline and most quinolones (i.e., Cipro®). Since there is a 1:1 bioavailability with these antibiotics, there is no loss of efficacy upon switching to oral therapy. With the β-lactams (penicillin, cephalosporins) and macrolides, the switch to oral therapy is associated with a decrease in serum levels, compared with intravenous therapy.

For more information about Script Notes, or questions about our formulary please visit our website: www.keystonemercy.com.

Formulary Update: Additions to the Keystone Mercy Drug Formulary

Additions to Formulary			
Drug	Effective Date	Starting Dose	Maximum Daily Dosage
Advair® HFA	October 2006	2 inhalations of 45/21 or 115/21 twice daily*	2 inhalations of 230/21 twice daily
Avandaryl®	October 2006	4mg/1mg once daily with first meal of the day**	8mg/4mg once daily with first meal of the day
Meloxicam	October 2006	7.5mg once daily	15mg once daily
Requip® (ropinirole)	October 2006	0.25mg once daily	4mg once daily

* Starting dose for patients not currently on inhaled corticosteroids.
 ** Starting dose for patients not already treated with a sulfonyleurea or a thiazolidinedione.

Advair® HFA (fluticasone propionate/salmeterol)

Indications: For maintenance treatment of airway inflammation and constriction in asthma for patients 12 years and older. Advair® HFA is the combination of an inhaled corticosteroid, fluticasone propionate, and an inhaled long-acting bronchodilator, salmeterol, in a metered-dose inhaler (MDI) delivery device. This same combination became available in 2001 as a dry-powdered inhaler (DPI) known as Advair® Diskus. The MDI dosage form offers an alternative delivery system for patients who are unable to use dry-powder inhalers. Advair® HFA is also an environmentally friendly formulation containing hydrofluoroalkane (HFA-134a) instead of chlorofluorocarbon (CFC) to propel the medication from the canister.

Dosing: The recommended dosing frequency of Advair® HFA is two inhalations twice daily. Advair® HFA is available as 45/21, 115/21, and 230/21 mcg fluticasone propionate/salmeterol, and each 12-gram canister provides 120 metered inhalations.

Avandaryl® (rosiglitazone maleate/glimepiride)

Indication: For improvement of glycemic control in patients with type-2 diabetes. Made by GlaxoSmithKline, Avandaryl® is a fixed-dose combination of a thiazolidinedione, rosiglitazone maleate (Avandia®), with a sulfonyleurea, glimepiride (Amaryl®). Rosiglitazone targets insulin resistance and helps the body respond better to its own natural insulin, and glimepiride helps the body release more of its natural insulin. Avandaryl® improved glycosylated hemoglobin and fasting plasma glucose levels better than a sulfonyleurea alone.

Dosing: The tablets are available in combinations of 4mg rosiglitazone maleate with 1, 2, or 4mg glimepiride. Avandaryl® is given once daily with the first meal of the day to patients who are currently treated with a combination of rosiglitazone and a sulfonyleurea, who have responded to rosiglitazone and require additional glycemic control, or who are not controlled on a sulfonyleurea alone.

Meloxicam (generic of Mobic®)

Indications: For relief of the signs and symptoms of osteoarthritis (OA), rheumatoid arthritis (RA), and pauciarticular/polyarticular course juvenile rheumatoid arthritis (JRA). The U.S. Food and Drug Administration granted approval of an Abbreviated New Drug Application (ANDA) on July 20, 2006. Currently there are 13 manufacturers expected to produce meloxicam. Meloxicam activity may be related to cyclooxygenase synthetase inhibition, mainly cyclooxygenase-2 (COX-2) inhibition. Meloxicam appears to cause fewer adverse gastrointestinal events than standard, non-COX-2 selective nonsteroidal anti-inflammatory drugs (NSAIDs).

Dosing: The recommended starting and maintenance dose is 7.5mg once daily. Some patients may receive benefit by increasing to the maximum daily dose of 15mg.

Requip® (ropinirole)

Indication: For moderate to severe primary restless legs syndrome (RLS). The Therapy with Ropinirole Efficacy and Tolerability in RLS US Study (TREAT RLS US), supports Requip®, a non-ergot-based, second generation dopamine agonist, to significantly improve symptoms and quality of life of patients with RLS compared with placebo. Even with low starting doses, improvements were observed as early as the third day and the first week.

Dosing: The recommended starting dose of Requip® for RLS is 0.25mg once daily one to three hours before bedtime. The dose may be increased after week 2 by 0.5mg on a weekly basis. Maximum recommended dose for this indication is 4mg once daily.

Product Updates

Please be aware the information discussed in this section is to provide the reader with product updates only. It is not indicative of what is currently or will be on Keystone Mercy's formulary.

Two new extended-release tetracycline products were recently approved. One product, **Solodyn®**, is an extended-release minocycline. It is indicated to treat inflammatory lesions of non-nodular moderate to severe acne in patients who are 12 years or older. Solodyn® is administered once daily for up to 12 weeks, and dosing is based on the weight of the patient (1mg/kg). Keep in mind this product is not bioequivalent to or interchangeable with other minocycline products. Some common adverse effects are headache, fatigue, dizziness, pruritus, and malaise. Solodyn® is available in extended-release tablet doses of 45mg, 90mg, and 135mg.

Another new tetracycline product, **Oracea®**, is a combination of immediate- and delayed-release doxycycline beads. It is indicated for the treatment of inflammatory lesions of rosacea in adult patients. The efficacy of Oracea® beyond 16 weeks has not been established. Oracea® should be taken once daily in the morning on an empty stomach (1 hour prior to meals or 2 hours after meals). An adequate amount of fluid should be taken with this medication to wash it down to reduce the risk of esophageal irritation and ulceration. This medication is not bioequivalent or interchangeable to other doxycycline products. Some common side effects are diarrhea, nasopharyngitis, hypertension, sinusitis, and abdominal pain. Oracea® is available as a 40mg capsule containing 30mg of the immediate- and 10mg of the delayed-release beads.

Erectile Dysfunction Medications No Longer a Covered Benefit

As of March 1, 2006, medications for the treatment of erectile dysfunction (ED) are no longer a covered benefit under the Pennsylvania Medical Assistance Program. The medications in this category include Cialis®, Levitra®, Viagra®, Muse®, Caverject® and Edex®. Requests for these medications, when used to treat erectile dysfunction, will be denied on the basis that they are not a covered benefit under the Medical Assistance Program.

Keystone Mercy Health Plan ended the approval of prescriptions and refills for Cialis®, Levitra®, Viagra®, Muse®, Caverject® or Edex® on November 1, 2006.

If you have any questions about this, please call Provider Services at **800-521-6007**.

Safety Alerts:

Cough and Cold Product Challenges

Choosing the right cough and cold products for patients can be a challenge. There are some potentially serious drug-drug interactions between cough and cold products and commonly prescribed medications. Also, chronic illnesses such as ischemic heart disease, hypertension, hyperthyroidism, increase intraocular pressure, prostatic hypertrophy, and diabetes need to be considered when recommending a cough and cold product for patients. For example, oral decongestants such as pseudoephedrine may not be the best choice for some patients with chronic cardiovascular conditions due to their ability to increase blood pressure and heart rate. Patients taking monoamine oxidase inhibitors (MAOIs) should avoid cough and cold products containing phenylephrine and pseudoephedrine due to their ability to rapidly increase the blood pressure. The co-administration of MAOIs with the cough suppressant dextromethorphan can result in serious adverse effects such as hyperpyrexia, abnormal muscle movement, hypotension, coma, and death. Therefore, this combination should be avoided. The co-administration of tricyclic antidepressants and phenylephrine has resulted in dysrhythmias and hypertension in patients. When choosing a cough and cold product, beware of the patient's medications and medical history. For OTC cough and cold products, try to use products designed for patients with particular chronic conditions (i.e. diabetes, hypertension).

Due to recent federal regulations limiting the sale of pseudoephedrine, many manufacturers of OTC products have been chosen to reformulate their product line with phenylephrine. Please double check the products you recommend to familiarize yourself with any formulation changes. It is also important to note that existing quantity limits for products that still contain pseudoephedrine (i.e. Claritin-D®) may be exceeded with a prescription.

Liver Toxicity with Ketek® (telithromycin)

Based on published case reports and the FDA's safety assessment, warnings about the risk of liver toxicity have been added to Ketek®'s drug label. Although liver toxicity is rare in patients taking Ketek®, it is a serious risk. Acute hepatic failure and severe liver injury, in some cases fatal, were reported in patients who were currently being treated or were recently treated with Ketek®. Patients on Ketek® should be monitored for signs and symptoms of hepatitis such as fatigue, malaise, anorexia, nausea, jaundice, bilirubinuria, acholic stools, liver tenderness, and hepatomegaly. Review the signs and symptoms with patients. Advise them that if any signs or symptoms arise, they should discontinue Ketek® and immediately seek medical attention.

Misadministration Warning

With many OTC cough and cold products available for pediatric patients, there is a potential for misadministration errors. For example, many cough and cold products for pediatric patients come in different concentrations depending on the age group. Parents will sometimes use the same product for all their children in the home. This administration error could lead to either over- or under-dosing the child. Parents will sometimes also use different measuring devices that may not administer the appropriate amount of medicine. When recommending a product and/or dose for cough and cold medicines, the following maybe helpful to avoid serious administration errors:

- Recommend a product that is age appropriate.
- Instruct parents to use the dispensing device provided.
- When providing administration instructions, make sure the parent understands the amount to dispense and the frequency.
- Instruct parents to contact the physician if there is no improvement in signs and symptoms by a designated time.
- Review possible side effects of the cough and cold product with parents.

Drug-Drug Interactions with Triptans

The FDA recently reported serious drug-drug interactions between the migraine medication class, 5-hydroxytryptamine receptor antagonists (triptans), and the two classes of behavioral health medications, selective serotonin reuptake inhibitors (SSRIs) and selective serotonin/norepinephrine reuptake inhibitors (SNRIs). The co-administration of triptans with SSRIs or SNRIs results in an increased risk of serotonin syndrome due to a rapid accumulation of serotonin in the central nervous system. The signs and symptoms of serotonin syndrome are loss of coordination, tachycardia, rapid changes in blood pressure, hyperthermia, overactive reflexes, nausea, vomiting, and diarrhea. When prescribing and dispensing these medications in combination, patients should be aware of the risks as well as the signs and symptoms of serotonin syndrome. The FDA has requested that the manufacturers of triptans, SSRIs, and SNRIs update their prescribing information to warn about this serious drug-drug interaction.

The Risk of Q-T Prolongation and/or Torsades de Pointes with Antibiotics

Q-T prolongation is an abnormal condition of the heart's electrical system. The Q-T interval is a measure of how long it takes the heart to repolarize after each beat. The prolongation of the Q-T interval may result in an arrhythmia known as torsades de pointes. Some symptoms of this condition are fainting, dizziness, syncope, palpitations, and cardiac arrest. Antibiotic classes such as fluoroquinolones, macrolides, and ketolides have been associated with causing Q-T prolongation and/or torsades de pointes. These antibiotics, along with physiological and drug-related factors, increase a patient's risk of experiencing a Q-T prolongation and/or torsades de pointes. Some of the physiological factors are gender (women have increased risk); age (elderly have an increased risk); illnesses/disease states (psychiatric patients or bulimic patients); cardiac conditions (bradycardia); and electrolyte disturbances (hypokalemia and hypomagnesemia). Some drug-related factors include metabolic drug interactions (inhibition of CYP450 system resulting in higher concentrations of a drug known to cause Q-T prolongation) and the combination of two or more drugs with the potential for prolonged Q-T intervals (i.e. class IA and class III antiarrhythmics, methadone, and risperidone). When choosing a macrolide, a fluoroquinolone, or a ketolide for patients, not only should resistance be a factor, but safety as well.

Pravachol® Formulary Alert

As of December 11, 2006, Keystone Mercy Health Plan no longer approves the Pravachol® 80mg tablet for new and refill prescriptions. The generic alternative for Pravachol®, pravastatin, is now available for the 10mg, 20mg, and 40mg tablets. To take advantage of the generic alternative, members are required to use two pravastatin 40mg tablets instead of the Pravachol® 80mg tablet. Providers have been informed of this formulary change. Please note, in the event that a member presents a new or refill prescription for the Pravachol® 80mg tablet, pharmacists are required to contact physicians to get the prescriptions changed from the Pravachol® 80mg tablet to two pravastatin 40mg tablets.

If you have any questions about this formulary change, please call Provider Services at **800-521-6007**.

Medications Requiring Prior Authorization

Medication	Effective Date	Prior Authorization Criteria
Combivir®	November 2006	Patients must have a documented or anticipated intolerance or suboptimal adherence to Epivir® and Zidovudine as separate agents.
Pulmicort Respules®	October 2006	Patients must use 0.5mg/2mL once daily instead of 0.25/2mL twice daily.
Singulair®	November 2006	<i>10mg Tablet:</i> Second-line agent for allergic rhinitis in patients > 19 y.o. with use of asthma medications in the previous 12 months or concurrent use.
Topamax®	November 2006	<i>Seizure Disorder:</i> Patients must be currently receiving another anticonvulsant. <i>Migraine Prophylaxis:</i> Patient must have documented use of migraine abortive medication in the past 6 months and trial and failure of at least 3 formulary agents with demonstrated efficacy for migraine prophylaxis.
Trizivir®	November 2006	Patients must have a documented or anticipated intolerance or suboptimal adherence to Epizom® and Zidovudine as separate agents.

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