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Sulfa Allergy

Sulfonamide (sulfa) allergies can be confusing. The allergy can present in the skin as anything from a mild maculopapular (bumpy) rash to a life threatening toxic epidermal necrolysis. Other organs systems can be involved, as the immune system inexplicably turns on the bone marrow (various anemias), liver (jaundice, hepatitis), lungs (pneumonitis) or kidneys (interstitial nephritis, glomerulonephritis, tubular necrosis). Anaphylaxis and other multi-organ reactions are also possible.

There are a multitude of drugs in different families that contain the sulfa chemical group. These can be divided most simply into two groups, antibiotic and non-antibiotic. Bactrim®/Septra®, Sodium Sulamyd® drops and Flamazine® cream are the available sulfa antibiotics. Non-antibiotic sulfonamides include: Celebrex®, Flomax®, most diuretics, sulfonyleurea oral diabetic agents (e.g. glyburide and gliclazide), some eye drops used for glaucoma, etc. The two sulfa

types are quite distinct. When a patient reacts to a sulfa drug from one group, they are quite unlikely to react to a member of the other. Sulfasalazine, a drug used for inflammatory bowel disease is structurally similar to the sulfa antibiotics and is an exception to this rule.

We often get calls about drugs containing sulfur, sulfate or sulfite groups. Although these sound like “sulfa” drugs, they are unrelated and should not present a risk. Sulfa allergies can be extremely severe and must be avoided. Atopic individuals with allergies to one antibiotic class are ten times more likely to react to other antibiotics, so beware.

More on Magnesium

In the March edition of the GeriJournal I wrote about PPIs and their potential to cause hypomagnesemia. While checking magnesium (Mg) blood levels may be helpful for these residents, the body’s regulatory system is usually able to keep levels in the normal range. This is possible because most Mg is found in bone and within cells and can be moved rapidly to the bloodstream, if necessary.

If residents are symptomatic, particularly if they are taking a diuretic and are hypokalemic or are taking a PPI, a Mg supplement should be added. A dose of 50mg twice daily or 25mg three times daily is

inexpensive and should resolve the deficiency.

Digoxin and Pulse

How often do you check the pulse of your residents taking digoxin? Daily? Weekly? Monthly? What’s the magic “hold” number...60...55...50? When considering the time spent checking pulses versus the potential to identify digoxin toxicity, these are difficult questions to answer.

Digoxin is an older drug, but is still useful in the treatment of congestive heart failure (CHF) and atrial fibrillation (AF). In CHF it strengthens cardiac contraction and efficiency. It slows the heart to reduce weakness, shortness of breath, palpitations and chest pain in AF patients with symptoms.

The very high digoxin doses of the past have been left behind. β -blockers are the mainstays of CHF and AF treatment now, reducing pulse considerably on their own. Amiodarone, verapamil (AF only) and other drugs that slow heart rate may also be used, further complicating the rate question.

In stable residents, frequent pulse checks offer little benefit. Those with symptoms or fluctuating heart rate should be followed more closely. Consider discussing this matter at PAC and seeking individualized pulse thresholds and frequencies.