



The GeriJournal

Volume 4, Number 1
January 2009

A publication of GeriatRx Pharmacy

Plavix Interaction

Plavix® has been around for some time but we are still learning how to best use it. A new interaction with proton pump inhibitors - PPIs (Losec®, Prevacid®, Pariet®, Pantoloc® and Nexium®) has been identified. This interaction can reduce the effectiveness of Plavix®.

Plavix® (clopidogrel) is susceptible to interactions because it is a “prodrug”. This means that it has no effect until it is converted into its active form in the liver. It seems that some, or all, PPIs inhibit the enzyme involved in the activation process.

The suspected interaction was confirmed early last year in a clinical trial. The trial evaluated the ability of Plavix® and ASA to inhibit platelet aggregation. Platelets stuck together significantly more in the presence of Losec®. When platelets clump in the coronary vessels of the heart, they can block blood flow and cause an MI.

After the release of this initial study a large retrospective

study was conducted by Aetna Insurance in the United States. Policy holders taking Plavix® were nearly four times as likely to suffer an MI if they had been taking a PPI for more than six months, compared to those not taking PPIs.

Plavix® can irritate the lining of the stomach and PPIs have been recommended in the past to provide GI protection. This practice may have to be reevaluated. Although this interaction is not completely understood, Losec® and Nexium® seem to be the most offensive PPIs. They have the greatest inhibitory effect on the enzyme system of the liver involved in the activation.

We will do an analysis of all residents taking Plavix® in your facility. PPI interactions will be identified. Alternatives to Losec® or Nexium® will be suggested. Discontinuation of the PPI may also be recommended.

Vasotec Returns

On January 8th, Vasotec® returned to the Formulary. In an odd twist, generic enalapril was dropped from coverage.

The name brand product is the same shape, size and colour as the generic product we have been using. There is a slight change in the tablet markings and these will be indicated in the description on both the MAR and medication pouch.

The End of INRs?

The day may be coming soon! Two new oral anticoagulants have been approved in Canada and neither requires monitoring of INR.

The new drugs are Pradax® (dabigatran) and Xarelto® (rivaroxaban). They work by inhibiting the action of different clotting factors. They have a rapid onset of action and their effect is lost shortly after they are discontinued.

Warfarin acts by blocking the production of vitamin K linked clotting factors. It takes several days for warfarin to begin working. With excessive warfarin doses, the body's supply of clotting proteins becomes depleted. The INR and risk of bleeding increase.

The new agents are effective in preventing thrombotic events following knee and hip replacement surgery. They are being studied in patients with atrial fibrillation as well. With fewer drug interactions than warfarin, once daily dosing, a rapid onset of action, no monitoring requirements and only one or two strengths to choose from, these drugs have many clear advantages. They are not covered by ODB yet, but should they continue to prove safe and effective, these advantages will be difficult to ignore.

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