RGH Pharmacy E-Bulletin

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A joint initiative of the Patient Services Section and the Drug and Therapeutics Information Service of the Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia. The RGH Pharmacy E-Bulletin is distributed in electronic format on a weekly basis, and aims to present concise, factual information on issues of current interest in therapeutics, drug safety and cost-effective use of medications.
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Combination antihypertensive products

Hypertension is one of the most common causes of cardiovascular disease and death, being a major risk factor for stroke, coronary artery disease, chronic kidney disease and heart failure. Treatment-resistant hypertension is also a common occurrence, with an estimated 50 – 75% of patients being unable to reach blood pressure goals with drug monotherapy. The large number of patients taking multiple drug therapy for hypertension and the considerable costs associated with these drugs are both factors which have led to the development of a number of combination antihypertensive products. These combinations are promoted as having benefits such as increasing compliance and reducing costs, with patients only needing to pay for one co-payment if the product is listed on the Pharmaceutical Benefits Scheme (PBS) and having to take fewer tablets each day.

There are also disadvantages to these combination products which should be taken into consideration. As the products are only available in fixed-dose combinations, this reduces flexibility with dose titration. Combination products with similar brand names and packaging to their constituents can also easily cause confusion amongst patients and healthcare providers. Problems can occur if patients do not understand that they are taking a combination medication which may replace up to three of their regular medications.

Another complication which can occur with combination products is when adverse effects are experienced and the difficulty arises of attributing the adverse effects to one of the components. This can be of particular importance if the adverse reaction is severe. If causality cannot be certain then all drugs in the combination product may need to be avoided in the future.

The first triple antihypertensive combination product has recently been PBS listed as of 1 November 2010 as a restricted benefit for the management of hypertension. This combination product consists of an angiotensin 2 receptor antagonist (valsartan), a dihydropyridine calcium channel blocker (amlodipine) and a thiazide diuretic (hydrochlorothiazide). The product is available in five different combinations of varying strengths and is produced under the brand name Exforge HCT®. This product has been developed after combinations of valsartan and hydrochlorothiazide are currently available in five strengths (Co-Diovan®) and valsartan and amlodipine combinations are available in three different strengths (Exforge®).

There is high potential for confusion with these products and care must be taken when specifying the drug combination name and strength. With increasing numbers of patients taking multiple medications the potential for drug combination products to expand is undoubtedly going to create some confusion amongst patients and their healthcare providers. Both patients and providers will need to be vigilant in ensuring drug errors are not inadvertently made and that patients are adequately counselled and understand exactly what medication they are taking.

This E-Bulletin is based on work by Ellise Liew, Clinical Pharmacist, RGH

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