

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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Fixed dose combination therapy

Fixed-dose drug combination products are not new to Australia. Combination analgesics and OTC products, as well as combinations involving antibiotics, or laevodopa combined with a decarboxylase inhibitor to reduce peripheral adverse effects have been available for many years, and are widely accepted. The increased availability of fixed-dose combinations for the management of hypertension, type 2 diabetes and dyslipidaemia has the potential to influence initial prescribing choices and rational prescribing habits.

Advantages of fixed dose combination products:

- Convenience – prescribing and taking one combination product is more convenient than each component separately.
- Cost – if subsidised through the Pharmaceutical Benefits Scheme of other payers, fixed-dose combinations product may reduce the patient's co-payment.
- Compliance/adherence – intuitively, taking one product rather than multiple products may improve compliance but evidence assessing this with fixed-dose combinations is conflicting.

Disadvantages of fixed dose combination products:

- Dose adjustment – individual components cannot be easily adjusted to meet the needs of the individual patient with limited fixed-dose combinations.
- Pharmacokinetics – problems arise when the individual components have different pharmacokinetic profiles e.g. paracetamol/dextropropoxyphene combinations. Regular dosing of dextropropoxyphene can result in accumulation and toxicity especially in the elderly and/or in renal impairment.
- Adverse effects – if a patient experiences intolerable adverse effects, the drug causing the AE may be difficult to identify. Dose reduction of one component may not be possible, necessitating cessation of both components, risking clinical deterioration.

Initiating therapy

Initiation with a combination product is often inappropriate and not considered rational prescribing for therapy initiation in chronic disease. Fixed dose combination products may simplify therapy for patients and prescribers, only after the individual drugs have been titrated to an effective tolerated dose and an equivalent fixed dose combination product has been identified. Individual drug titration is recommended for initiation of therapy for the management of hypertension, dyslipidaemia and type 2 diabetes.

Considerations in the elderly

Drug tolerability is a major issue for the elderly and is important to consider this when initiating medication. Some fixed dose combinations are only available at doses higher than would normally be prescribed either initially or as a maintenance dose in the elderly e.g. candesartan 16 mg and hydrochlorothiazide combination product or trandolapril 4 mg and verapamil 240 mg combination product. It is important to be conscious of the doses contained within combination products to ensure they are appropriate and to avoid adverse effects.

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FOR FURTHER INFORMATION – CONTACT THE PHARMACY DEPARTMENT ON 82751763 or email: chris.alderman@rgh.sa.gov.au
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