Your questions to the PBAC

Glucosamine

As a pharmacist doing home medicines reviews, I frequently come across patients suffering from osteoarthritis who are taking (selective or non-selective) non-steroidal anti-inflammatory drugs (NSAIDs) for relief. As these patients often also suffer from conditions such as hypertension or heart failure, my recommendations include comments about NSAIDs interfering with blood pressure control, or aggravating heart failure. Many patients are on ACE inhibitors, diuretics and the NSAID, which constitutes the 'triple whammy' that puts them at increased risk of acute renal failure. Problems arise when I wish to suggest alternatives. Regular maximum dose paracetamol is fine if it works. There is evidence that glucosamine is effective, and may slow the progression of the disease. However, many patients will not take glucosamine because of the cost, compared to their NSAID which is subsidised by the Pharmaceutical Benefits Scheme. Considering the amount spent on COX-2 inhibitors and the cost of dealing with patients hospitalised by adverse effects (gastrointestinal complications, aggravated heart failure, acute renal failure), I am surprised that glucosamine is not subsidised.

I would like to know whether a cost-effectiveness formula has been applied to glucosamine, and what the chances are of it being subsidised. Has it been considered at all? Is there no multinational drug company out there lobbying for it, so it doesn't even find its way to the Pharmaceutical Benefits Advisory Committee (PBAC). Does the PBAC only consider drugs that are presented by the drug companies, or do you ever go searching (through the clinical trials) for other (cost-effective) drugs?

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PBAC response:

The Pharmaceutical Benefits Advisory Committee (PBAC) bases its recommendations on the evidence submitted to it. An application for listing requires appropriate data and evidence supporting the submission so manufacturers are usually in the best position to provide such information. The PBAC cannot compel a manufacturer to make an application for a particular drug or condition. To date, no application meeting the criteria for listing on the Pharmaceutical Benefits Scheme (PBS) has been submitted. Consequently, the PBAC cannot recommend that glucosamine be listed on the PBS.

Medicinal mishap

Severe hyponatraemia associated with omeprazole

Prepared by Adam Morton, Physician, Mater Misericordiae Hospital, South Brisbane, and John Mackintosh, Oncologist, Mater Private Hospital, South Brisbane

Case

A 43-year-old woman presented with epigastric pain and tenderness nine days after completing her second cycle of chemotherapy for a temporoparietal lymphoma. She was prescribed omeprazole 20 mg twice a day.

Two days later, after three doses of omeprazole, the patient complained of nausea, weakness and feeling twitchy. Physical examination was unremarkable, but her serum sodium concentration had fallen from its pre-treatment value of 138 to 117 mmol/L. Her serum urate was 0.12 mmol/L, urine sodium was 35 mmol/L and urine osmolality 615 mmol/L. Plasma glucose and tests of thyroid, adrenal and renal function were normal. This is consistent with the syndrome of inappropriate antidiuretic hormone secretion.

The patient was given one litre of hypertonic saline over 24 hours and was placed on fluid restrictions. The omeprazole was ceased. Within three days her sodium concentration had returned to normal and has remained so over the ensuing eight months without fluid restrictions.

Comment

In 2003–04, omeprazole was the fourth most commonly prescribed drug on the Pharmaceutical Benefits Scheme.[1] Seven previous cases of hyponatraemia have been associated with proton pump inhibitors. With the exception of one case ascribed to lansoprazole, all these cases followed exposure to omeprazole.[2,3,4,5,6,7,8] Consistent features were the:

- rapid onset of hyponatraemia with the majority of cases presenting within 11 days of starting treatment
- severity of hyponatraemia
- rapid recovery after cessation of the drug.

The Adverse Drug Reactions Advisory Committee has received 18 reports of hyponatraemia associated with omeprazole, including six where it, or esomeprazole, was the sole suspected drug.