Prescription labelling concerns

Dear Editor,

Over the Christmas period a patient of mine took a prescription I had written for simvastatin to a pharmacy where he was on holiday. He has since come back to show me the label that the pharmacy put on the box (transcribed as below).

> Avoid grapefruit and its juice
>
> 90 SIMVASTATIN 20 MG Tabs (ARRW)
>
> Take ONE tablet ONCE daily (best taken in the evening). We recommend taking Co Enzyme Q10 with this medication. Ask your pharmacist.

I myself made no reference to co-enzyme Q-10, that recommendation was inserted by the pharmacist.

I have two questions:

1. *What exactly is co-enzyme Q-10, and is it indeed a product that should be taken with simvastatin?*
2. *The co-enzyme Q-10 addition was made without my knowledge or permission. Has the pharmacist the right to do so, and where do I stand legally if the inserted information is incorrect?*

Dr Bill Daniels, GP
Auckland

Co-enzyme Q10 (also known as ubiquinone) assists in the production of energy within cells and helps protect cell membranes against oxidation. Approximately half of the body's co-enzyme Q10 is obtained from the diet. Supplementation of co-enzyme Q10 is used as a treatment for serious mitochondrial disorders and other metabolic syndromes, when people are unable to produce enough co-enzyme Q10.

The suggestion that co-enzyme Q10 should be used concurrently with statins is most likely based on evidence that statin treatment can lower circulating levels of co-enzyme Q10, but the clinical significance of this is uncertain. Intramuscular levels of co-enzyme Q10 are not affected by low-dose statin treatment, therefore the role of co-enzyme Q10 for the treatment of statin-induced myopathy would be questionable. There have also been suggestions in the literature that co-enzyme Q10 may be used as a treatment for hypertension. However, to date, no clear evidence exists that co-enzyme Q10 should be used to treat, or supplement medication taken for any of these conditions.[1,2]

For further information see"Upfront: The role of co-enzyme Q10 supplements in medical treatment", BPJ 8 (Sept, 2007).

In regards to the appropriateness of additions being made to prescription labels, the Pharmaceutical Society has responded; It supports additional labelling to prevent adverse reactions, and to ensure that medicines are taken in the most effective manner. However, in the present case, the Society considers the labelling to be advertising and misleading, as it implies the recommendation has been endorsed by the patient's doctor.

The Society also reminds Pharmacists that under their code of ethics: "Commercial interests shall not over ride their own professional judgement – obligation 4.4. And, that they may only promote a product as efficacious when there is creditable evidence of it being so – obligation 8.8."

If a prescription is modified without the prescriber's knowledge, they cannot be reasonably held accountable for any adverse consequences.

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Breast cancer gene testing funded

Dear Editor,
Your article, "Increasing the uptake of breast screening", BPJ 34 (Feb, 2011), states that BRCA (breast cancer gene) testing costs $2000-3000 and is not funded.

Providing the patient meets specific criteria the test is in fact funded.

Dr Jo Fleury, GP
Auckland

The statement made in the article "Increasing the uptake of breast screening", Page 38, The breast cancer gene, does require clarification. Referrals for genetic risk assessment and genetic counselling are funded in all DHBs. BRCA mutation testing is also offered (and funded) where, following risk assessment, the probability of a mutation being present is calculated to be 20% or higher. Risk assessment requires a three generation family history and tumour histology analysis of affected family members. If a familial mutation has not been previously identified, testing begins with affected family member DNA (in order to reduce false negatives) and can take up to six months.

Private laboratories do offer BRCA testing for people who do not meet funding criteria, however, the cost is $2000-$3000.

In a further clarification of this section of the article – it was mentioned that women who test positive for a breast cancer gene mutation can reduce their risk of developing breast cancer, with options including more frequent screening, hormonal therapy (tamoxifen) or prophylactic mastectomy or oophorectomy (removal of the ovaries). It was stated that oophorectomy reduces the risk of breast and ovarian cancer for people with BRCA2 mutations. However, the correct procedure is a salpingo-oophorectomy (removal of an ovary together with the fallopian tube) since the majority of BRCA-related ovarian cancers start in the fallopian tubes. In addition, this reduces the risk of breast and ovarian cancer for both BRCA1 and BRCA2 mutations.

Thank you to **Dr Caroline Lintott**, Senior Genetic Associate, Genetic Services, Christchurch for expert guidance in developing this answer.

Dyspepsia – PPIs, prokinetics and *H. Pylori* testing

Dear Editor,
I read with interest the guidance provided in Best Practice Journal on the management of dyspepsia and heartburn in general practice (BPJ 34, Feb 2011).

I note that much of this article also applies to the management of dyspepsia and heartburn in community pharmacy. I also note some variation in your advice from that provided in the New Zealand Guideline Group's best practice, evidence-based Management of Dyspepsia and Heartburn guideline (2004).

Most notably, bpac^{nz} advocates the use of a proton pump inhibitor (PPI) as first-line therapy in undifferentiated and functional dyspepsia, though the strength of evidence to support this approach is not immediately obvious. In contrast the NZGG guideline recommends treating according to symptoms, and recognises that undifferentiated and functional dyspepsia without symptoms of reflux may well respond better to a prokinetic agent, rather than an acid suppressant.

I'm conscious that the NZGG guideline and my knowledge of this area is somewhat dated and I'd be keen to learn of any advances in evidence to support PPI as a first-line therapy option in the management of undifferentiated and/or functional dyspepsia.

Andrew Orange, Pharmacist
Palmerston North

Dear Editor,

In the 2007 article about dyspepsia (BPJ 4, Apr 2007), the faecal antigen test for H.Pylori *was considered to have far better sensitivity and specificity than serology and was the recommended test but in the 2011 article (BPJ 34, Feb 2011) serology is preferred - why?*

Also in the 2007 article, for dyspepsia without heartburn the NNT for ranitidine was lower than the NNT for PPI, so why are you now recommending to use PPI as a first-line in patients with dyspepsia without heartburn?

Also could you please comment on the cardiac safety of domperidone and what to be aware of when prescribing this?

Dr Daniel Then, GP
Dunedin

Proton Pump Inhibitors (PPI)

In the article "Managing dyspepsia and heartburn in general practice – an update" (BPJ 34, Feb 2011) proton pump inhibitors (PPI) are recommended as first-line treatment in undifferentiated and functional dyspepsia, i.e. dyspepsia which has either not been investigated in a low risk patient, or dyspepsia that has been investigated with no underlying pathology found.

Since the New Zealand Guidelines Group guideline for the Management of dyspepsia and heartburn was published in 2004,[1] there has been an evidence based shift in practice that favours the use of PPIs as first-line therapy. This is because there is increasing evidence that PPIs are more effective in their ability to resolve the symptoms of dyspepsia than H2 receptor antagonists.[2,3,4,5,6] Although not expressed as NNTs, this evidence shows consistent statistically significant benefits for the empiric use of PPIs. The Cochrane reviews (and NNTs) quoted in the 2007 article have been withdrawn from publication because the conclusions have changed and an updated Cochrane review is awaited.[7] The availability of generic PPIs has also removed the previous cost benefit of H2 receptor antagonists.

The efficacy of prokinetic agents such as domperidone and metoclopromide has been debated in the recent literature.[5,8] Prokinetic agents are no longer recommended for first line therapy because of their potential for adverse effects and the evidence for their effectiveness is limited.[2,5,9,10]

Empiric treatment with PPIs in undifferentiated and functional dyspepsia therefore is favoured in evidence based guidelines that have been produced since the 2004 New Zealand guideline.[9,11,12] In addition, the use of PPIs as first line-therapy is only one step in the suggested approach for the treatment of undifferentiated dyspepsia given in the article. The suggested approach includes:

- The need to rule out the possibility of serious disease
- Consideration of the need for *H. pylori* testing
- Monitoring the response to empiric treatment so that other medicines or further investigations can be initiated if there is no response to PPI treatment

Serology or faecal antigen test?

Each of the available tests for *H. pylori* has advantages and disadvantages, hence the recommendation that the choice should be determined by the clinical setting. Carbon-13 urea breath test is the most accurate test but is not consistently available to general practice. Serology is more convenient to obtain for both the GP and patient and can determine whether the patient has been exposed to the infection. If infection is present and treatment is given, the faecal antigen test, which is able to detect active infection, can be used to test cure.

Testing for *H. pylori* is also best determined by the likely prevalence of *H. pylori* in the community. It is recommended to consider testing for *H.pylori* when there is a local

prevalence rate of greater than 30% (when serology tests are appropriate).

For further information about *H. pylori* testing, see "*Helicobactor pylori* testing: Serology and stool antigen testing" Best Tests (March, 2010).

Safety concerns with domperidone

Domperidone has been associated with rare reports of serious ventricular arrhythmia, QT prolongation and sudden cardiac death. In most cases, these events have occurred in patients who have had other cardiac risk factors, or in patients who received domperidone intraveneously.[7] The use of domperidone therefore should be avoided in patients who may be at increased risk of QT prolongation such as those with hypokalaemia, severe hypomagnesaemia or structural heart disease. It should also be used with caution in patients who are taking other drugs that may also cause QT prolongation, such as oral ketoconazole, fluconazole, erythromycin and amiodarone.[10]

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Erratum

The following text appeared in "Managing dyspepsia and heartburn in general practice" BPJ 34 (Feb, 2011):

> "Barrett's oesophagus is a complication of chronic GORD. It is a diagnosis made after endoscopy where normal cells lining the oesophagus (columnar epithelium) are found to be replaced by cells that usually line the gastric and intestinal mucosa (squamous epithelium)."

The correct text should read:

> "...It is a diagnosis made after endoscopy where normal cells lining the oesophagus (**squamous epithelium**) are found to be replaced by cells that usually line the gastric and intestinal mucosa (**columnar epithelium**)."

We value your feedback. Write to us at: Correspondence, PO Box 6032, Dunedin or email: editor@bpac.org.nz