Letters to the Editor

Clinical pharmacology and therapeutics

Sir,

I am writing with regard to the recent Reviews in Medicine article 'Clinical pharmacology and therapeutics' by M.J. Kendall and R.C. Horton.¹

Several points are made in the section 'Peptic ulcer disease' (p. 174) about the prostaglandin analogue misoprostol (note correct spelling) which do not accurately reflect the available data.

The authors incorrectly state that misoprostol does not prevent non-steroidal anti-inflammatory drug (NSAID)-induced duodenal lesions. Several studies have shown its efficacy both in the prevention^{2–6} and healing^{3,7,8} of NSAID-induced duodenal lesions. It is important to note, as the authors correctly do, that NSAID-induced damage has been shown in most studies to be predominantly gastric. Thus from the clinician's viewpoint when prescribing an agent to protect against NSAID-induced damage it is important to use an agent such as misoprostol which will prevent both gastric and duodenal damage.

The authors also incorrectly state that misoprostol is no better than placebo at preventing pain. Several studies have demonstrated that misoprostol is superior to placebo.^{9–11}

The authors state that 'how one identifies this population' (of patients likely to develop complications) is at present unknown. In fact there are now considerable data indicating various groups of patients who are at increased risk of developing complications if they take NSAIDs. Two large studies, one from the US¹² and one from Great Britain¹³ have identified various 'at risk' groups, in particular the elderly and those with a past history of gastrointestinal problems. These groups have been confirmed in another recent study.¹⁴ These data have recently been concisely reviewed.¹⁵

In conclusion misoprostol has been shown to prevent NSAID-induced gastric and duodenal damage and certain 'at risk' groups of patients can be identified. Studies to address the question whether the use of misoprostol will prevent serious morbidity are underway. Meanwhile the conclusion in a recent review¹⁶ regarding this aspect of the use of misoprostol would appear to be scientifically justified — 'it seems likely (though unproven) that normalization of the gastric mucosa will reduce the likelihood of gastric ulcer complications'.

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Iron deficiency in autoimmune chronic gastritis

Sir,

In a recent report Atrah and Davidson¹ concluded that iron deficiency is a common yet neglected complication of long-standing pernicious anaemia, related to chronic iron malabsorption. However, iron deficiency in the context of diffuse antrofundal atrophic gastritis, may present as the initial manifestation of this autoimmune disorder.

Three menstruating females, mean age 44, were diagnosed as having severe atrophic gastritis after gastroscopic study within the last 5 years (Medical records of Internal Medicine, Ramón y Cajal Hospital, Madrid). Physical examination revealed alopecia universalis, multinodular goitre and vitiligo, respectively, as positive findings. Patients denied menometrorrhagia. Laboratory findings showed hypochromic microcytic anaemia, low serum iron levels, low serum B₁₂ in one patient with an abnormal Schilling test, and positive serum antibodies to parietal cells. Gastric function tests yielded high serum gastrin levels and absolute achlorhydria. Oral iron replacement, plus hydroxocobalamin in the patient with vitamin B₁₂ malabsorption, re-established normal haematological data.

We report three patients with autoimmune chronic gastritis, associated in one patient with intrinsic factor hyposecretion, iron deficiency anaemia being the initial manifestation. Hypochromic microcytic anaemia can be secondary to chronic malabsorption of iron due to achlorhydria, but triggered by physiological features such as menstruation, although pathology such as undetectable blood loss might also contribute. Atrophic gastritis might explain some cases of iron deficiency, specially in young women, for two reasons. First, they have higher incidence of autoimmune diseases, including antrofundal chronic gastritis, and second, the presence of physiological mechanisms causing iron loss (menstruation, pregnancy).

We conclude that measurement of serum gastrin levels in all patients with iron deficiency anaemia of an unknown origin is advisable. This is particularly so if they present with autoimmune features such as alopecia universalis, vitiligo and diabetes mellitus. This will lead to an earlier diagnosis of vitamin B₁₂ malabsorption, and periodic gastroscopic examinations to detect the development of gastric carcinoma.

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Retinal infarcts and haemorrhages due to scurvy

Sir,

The main clinical features of scurvy are a vascular purpura with ecchymoses, gingival hyperplasia with gum bleeding. Ocular manifestations are very rare; conjunctival haemorrhage has been reported but we have been able to find no reports of retinal disease. We have recently encountered a patient with scurvy who had evidence of retinopathy. He was a 48 year old white male who presented to casualty with extensive bruising of his legs. Examination revealed confluent ecchymoses and the

classical signs of scurvy with cork-screw hairs and perifollicular hyperkeratoses over the lower abdomen with some perifollicular haemorrhages. There was marked gingival hypertrophy with spontaneous haemorrhage from the gums around very rotten teeth.

He lived alone, cooked for himself and ate mainly cereals and bread and no vegetables. He had eaten one single orange for his Christmas lunch the year before. He drank 80 units of alcohol per week. He had first noticed bleeding from his gums when he had bitten into a piece of cheese some weeks prior to admission. He reported no visual symptoms but ophthalmoscopy revealed several flamed shaped haemorrhages close to the left disc and three areas of 'cotton wool spots'.

His haemoglobin was 7.5 g/dl with a normochromic, normocytic picture. White cell count, platelets and prothrombin times were normal but his serum folate concentration was low (1.4 µg/l). Ascorbic acid absorption test conducted twice after admission revealed a urine ascorbic acid of less than 0.01 mmol/l whilst receiving a ward diet. Following treatment with ward food and a course of ascorbic acid, he rapidly improved and 3 months later his fundi were normal and his haemoglobin concentration was 11.6 g/dl.

Ocular manifestations of scurvy are rare but in children retrobulbar and subarachnoid bleeding has been reported.¹ We know of no other reports of retinal haemorrhages. Whilst the anaemia may have been a contributory factor, his extensive bruising elsewhere strongly suggest that increased capillary fragility was the main cause of his retinopathy.

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Hyperparathyroidism and cerebral haemorrhage

Sir,

Hyperparathyroidism presents with a wide variety of clinical symptoms derived from the well-known manifestations of gastrointestinal, kidney and bone disease,¹ as well as neurological complications, including psychoneurological disorders, myopathy² and rarely, ischaemic stroke.³ We report the dramatic presentation with cerebral haematoma of an asymptomatic young adult with hyperparathyroidism. This 35 year old man had, on routine examination, mild arterial hypertension detected a year before admission. No treatment was given. One day before admission, the patient suffered an abrupt right hemispheric headache, left-sided paralysis, left homonymous hemianopsia and reduction of the level of consciousness. On admission, blood pressure was 150/110 mmHg. Computed tomography disclosed an