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Prevention of peptic ulcer

THE use of misoprostol has been shown to reduce the risk of gastric and duodenal ulcers developing in patients taking non-steroidal anti-inflammatory drugs (NSAIDs). The overall risk of developing a serious upper gastrointestinal (GI) side effect from taking an NSAID is 1–2%. The MUCOSA (Misoprostol Ulcer Complications Outcomes Safety Assessment) trial has recently provided evidence that misoprostol is effective in reducing the risk of serious NSAID-induced GI events. In this study of 8843 patients taking NSAID[2] (all of whom had rheumatoid arthritis and were over the age of 52), two groups were allocated randomly, one to take NSAID with misoprostol and the other NSAID with placebo. Over the six-month trial period, 242 suspected GI events were reported, 67 of which were regarded as definite serious ulcer complications. Patients taking NSAIDs with misoprostol experienced a 40% reduction in bleeding, perforation and obstruction compared with the NSAID plus placebo group ($P<0.05$).

It would clearly be inappropriate to treat all patients on NSAIDS with misoprostol. Symptoms such as dyspepsia are unreliable predictors of ulcers and their complications. This paper uses the data of the MUCOSA trial and, using multivariate analyses on the 242 events reported, defines the subgroups most at risk from using NSAIDs.

Risk factors for the occurrence of a suspected GI adverse event were identified through a sequential process of logistic regression modelling. The following were all tested in both groups of the MUCOSA trial: age, prior cardiovascular disease, history of GI bleeding or peptic ulcer disease, sex, tobacco use, previous hepatic disease, prior use of H_2 receptor antagonists, prior use of misoprostol, hospitalization in the previous year, score on a modified health questionnaire (mHAQ), concurrent use of antacids, concurrent use of glucocorticoid and concurrent use of methotrexate.

The results of this analysis showed that the patients who benefited significantly from the concurrent use of misoprostol with an NSAID were those with a history of peptic ulcer disease (risk reduction 52.4%), previous GI bleeding (risk reduction 50%), or significant cardiovascular disease (risk reduction 38.3%), those with significant functional disability (risk reduction 87.2%), and those using antacids concomitantly (risk reduction 48.3%).

The paper is of great clinical value in defining those patients specifically at risk from the GI side effects of NSAIDs. This is particularly helpful in primary care, where decisions on treatment have to be made without the benefit of readily available diagnostic tests such as endoscopy. Of particular note are the increased risks associated with functional disability and cardiovascular disease. Any combination of these risk factors calls for caution in prescribing NSAIDs and indicates the need for concurrent use of misoprostol if an NSAID prescription is unavoidable.

J M GALLOWAY
General practitioner

Source: Simon LS *et al.* Risk factors for serious non steroidal-induced gastrointestinal implications: regression analysis of the MUCOSA trial. *Fam Med* 1996; **28:** 204-210.

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Aetiology of headaches in general practice

THESE two Scandinavian papers look at a symptom that is commonly found in general practice, and respectively consider whether headaches are family-learned illnesses behaviour and if there are any differences in association with background factors in a city population. As headaches vary from common tension headaches to disabling migraine and infrequent subarachnoid haemorrhage, any work that improves our understanding of the more common types of headache, in order that we may differentiate between them more easily, is to be commended.

These papers, which share two authors, look at the types of headache that one typically finds in general practice from a somewhat unusual perspective, and try to analyse them critically on a scientific basis to see if it is possible to draw any conclusions about their causation.

The Bardu study's intention is to explore the gender difference in reporting headache and also to analyse the association between people reporting their own headache and their reporting the same complaints amongst first grade relatives. It concludes that the females in the family, and the brothers and sisters, were the main family members imprinting the way in which the children were deciphering such symptoms later in life. Interestingly, the impact from a spouse makes little change to these illnesses.

Hasvold and his colleagues have also looked at non-migrainous headache, neck or shoulder pain, and migraine, examining the differences in association with background factors in a city population. This paper involving 18 105 people, explores the association between these types of headache and a set of variables describing demographic, health, psychosocial and life-style factors in a cross-sectional design. The inference from these results underscores the belief that migraine is reported by people with psychosocial backgrounds different from those of people who report chronic headache and neck or shoulder pain. Again, as expected, there is a marked gender difference.

C GEORGE M FERNIE
General practitioner, Canonbie

Source: 1. Hasvold T, Johnsen R. Headache and neck or shoulder pain - family learnt illnesses behaviour? The Bardu Musculoskeletal Study, 1989-1990. *Fam Practice* 1996; **13:** 242-246. 2. Hasvold T, Johnsen R, Firde UH. Non-migraine headache, neck or shoulder pain, and migraine - differences in association with background factors in a city population. *Scand J Prim Health Care* 1996; **14:** 92-99.

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Families and consultations

IN theory, primary health care should address the impact of a patient's illness on his or her family and the community. However, there are practical (e.g. time) and medicolegal (e.g. confidentiality) reasons that limit the application of this tenet. The authors of this paper suspected that doctors and patients faced with these conflicting influences undervalue a family-oriented approach to primary care.

The authors gauged how patients behaved with regards to bringing a family member or friend with them to the surgery and into the consultation. This was done by use of a questionnaire on arrival at the surgery. The questionnaire also defined demographic data and and parameters of family behaviour. We are not told where the study was held, but the questionnaires were distributed in an urban practice that trains 30 'family medicine residents'. Interpretation of the paper must therefore be influenced by this milieu, which is foreign to that of British general practice.

They found that 55% of patients expressed an interest in taking a companion into the consultation. However, only about 17% of adult patients did so. They reveal that none of their demographic or family behaviour parameters were useful predictors as to whether patients would attend the consultation accompanied. I suspect that a questionnaire designed to focus in greater depth on a

patient's reasons for attending the doctor would have produced more discriminating results.

This is a thought-provoking study. Its discovery that patients bring a companion into the consultation less often than they would desire raises many further questions. Does a doctor's behaviour in consultation overtly or covertly discourage the presence of a companion? Are there types of consultation in which the doctor should particularly encourage the participation of a family member or friend? I am sure that this paper will act as a spur to further study and research.

CLIVE WOODCOCK
General practitioner, Stoke-on-Trent

Source: Botelho RJ, Lue B-H, Fiscella K. Family involvement in routine health care: A survey of patients' behaviours and preferences. *J Fam Practice* 1996; **42:** 572-576.

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Intermittent claudication

ONLY 50% of people with intermittent claudication have consulted their doctor about it. Given such a low ascertainment of symptomatic disease, how far should general practitioners (GPs) go to identify people in whom the problem has not yet caused symptoms? This paper is concerned with such a step: the use of a Doppler device to compare systolic pressure at the ankle with that in the arm to identify the presence of peripheral vascular disease.

The paper describes the results of a survey of 40- to 75-year olds in 18 Dutch general practices. The prevalence of disease using the above ratio of pressures was 7%. Most had no symptoms, and most were not known by their GP to have the problem, particularly if they were female or under the age of 65 years, or if they had no other diagnosed vascular disease.

How useful would it be for a 55-year-old woman with no cardiovascular problems to know that this ratio was abnormal? The authors' arguments for the application of this test in primary care, although couched in careful language, are difficult to accept. Their earlier paper had established the repeatability of the measurement, but what of its validity? For yet another screening test to enter a crowded field, we need to know that it would identify a group of people who would not otherwise come into view as being at increased risk of vascular morbidity and mortality. More importantly we need to know from follow-up studies that they would benefit from such pre-symptomatic diagnosis.

However, if you want to know the size of the problem, the extent of its underdiagnosis and its potential contribution to cardiovascular risk, then this is a good paper to consult.

PETER CROFT
Professor of Epidemiology, Keele University

Source: Stoffers HEJH, *et al.* The prevalence of a symptomatic and unrecognized peripheral arterial occlusive disease. *Int J Epid* 1996; **25:** 282-290.

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Telemedicine in the UK and Australia

IT is always interesting to read of colleagues in primary health care adapting and utilising pre-existing technologies in the seach for new and improved means of delivering health care services. Such is the case with Webb and Watson in Victoria, Australia. They recently described a pilot scheme of transmitting live video images between two computers to facilitate the referral of four patients, one of whom was subsequently diagnosed as having a basal cell carcinoma. Webb and Watson were, understandably, delighted with their efforts and recognized the saving in travel time, journey costs and unnecessary hospital visits as only three of the potential benefits of video-teleconsulting.

Telemedicine, as it is now known, has been practised for almost 100 years, although only in the past decade with advances in IT capabilities has it received serious attention. Globally, telemedicine technology is advancing rapidly, and health service planners and users are now exerting pressure on health care providers to implement telemedicine services. Any introduction must, however, be tempered by an awareness of the continued uncertainty about the future role of telemedicine in the provision of health care, and by questions about the safety, effectiveness and costs of teleconsulting.

Interested readers are directed to the Royal Society of Medicine's publication, the *Journal of Telemedicine and Telecare.* Further details of UK centres active in telemedicine and its evaluation are available from the author.

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Health Services Research Unit, University of Aberdeen

Source: Webb SP, Watson ME. Teleconsulting. *Medical Journal of Australia* 1996; **165:** 176.

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Bowel disease and employment

THE incidence of chronic inflammatory bowel disease (CIBD) is rising in most industrialized countries, but the cause for this is not clear. It has been recognized for some time that there is a familial aggregation of cases, suggesting either an environmental or an infectious agent, but there is no clear proof for either theory. In 1990, Sonnenberg, from Germany, had suggested that certain occupational groups were more at risk than others. This paper set out to see whether such evidence also exists amongst Danish workers.

The unique National Inpatient Register in Denmark, cross referenced to the Central Population Register, allowed two cohorts of just over two and a quarter million men and women aged 20–59 years to be identified and subdivided according to their occupation, as categorized by the International Standard Classification of Occupations. All first-time admissions for CIBD were identified in the first cohort and all other causes for hospital admission were followed in the second, both over a 10-year period from 1 January 1981 to 31 December 1990. Analysis of these admissions revealed no evidence for a definite risk in any particular group of workers, although predominantly sedentary workers did have a slightly increased incidence of CIBD.

This is an interesting paper which, although not bringing us any closer to understanding the aetiology of CIBD, shows that particular occupational groups are at no increased risk of contracting the disease, but that, taken overall, sedentary workers do seem to be slightly more at risk than their more active colleagues. Is this another benefit of an active, healthy lifestyle? Further research will be required to find out why this may occur.

RICHARD PAGE
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Source: Boggild H, Tüchsen F, Orhede E. Occupation, employment status and chronic inflammatory bowel disease in Denmark. *Int J Epidemiol* 1996; **25:** 630-637.

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