This month • breast cancer • NSAIDS • referrals • pregnancy and diabetes • iron supplements • alcohol and mortality • coronary heart disease • help-seeking behaviour • violence against GPs

WEST OF SCOTLAND JOURNAL CLUB

DIGEST this month has been compiled by members of the West of Scotland journal club. The club reflects the close liaison between the undergraduate and postgraduate departments involved in general practice teaching which developed when Stuart Murray of the department of general practice at the University of Glasgow took up his appointment as regional adviser in general practice to the West of Scotland. The club began to meet in October 1985. The members are allocated specific journals to review, a total of 10, and each week give a short presentation to the group on an article or articles which are thought most relevant to general practice. A list of articles are sent to trainers and trainees in the region and other principals can opt to receive them as well.

Descriptions of the scheme and feedback from the general practitioners are currently in press.

Contributions published here are from Frank Sullivan, Moya Kelly, Jonathan Anderson and Valerie Oates. Other group members are Christine Crawford, Gillian Morrison, Tim Usherwood and Stuart Wood.

Treatment of terminal breast cancer

THE treatment of breast cancer has advanced in recent years and concentrates on remission and survival. However, there has been concern that patients reaching the terminal stage of their illness are perhaps over-treated. This paper from Finland takes a retrospective look at the investigations and treatment in patients with breast cancer who were near to death and compared this with similar patients who were not at a terminal stage. It was found that terminal patients had had a similar number of investigations at their last follow up visit to those who survived. Of those who died less than a week after attending hospital three-quarters had had radiological investigations at their last visit, and over 90% had had laboratory tests. A higher proportion of women who died than of women who survived received treatment at the last follow-up visit, and 2.6 times as many of those dying within one week of the last visit were given chemotherapy as were survivors with recurrent disease.

Similar symptomatic results may have been more easily and less expensively obtained by using painkillers or psychoactive drugs. The paper suggests that more attention was being paid to the cancer than to the patients themselves and it was felt that more emphasis should be placed on the care and comfort of the patients in the terminal stages of their illness rather than on continuing diagnostic activity and treatment of the cancer. This finding is perhaps particularly relevant to general practitioners who often find themselves the carer of the terminally ill patient at a time when the prime objective should be to improve the patient's quality of life as much as possible.

(M.K.)

Source: Holli K, Hakama M. Treatment of the terminal stages of breast cancer. *Br Med J* 1989; **298**: 13-14.

Rheumatoid patients' preferences for NSAIDS

NEW non-steroidal anti-inflammatory drugs used in rheumatoid arthritis are usually compared with indomethacin and the author of this article argues that the patients' expressed preference is the most important index of an arthritis drug's value as other measures have proved so unreliable. Bearing in mind that authors and journals are more likely to publish results in favour of newer preparations he reviewed 50 reports published from 1966–85 to estimate whether patients really prefer a newer drug over the established alternative. The therapeutic gain (% of patients preferring the newer drug) averaged only 5% but the confidence interval was 0–10%. The author suggests that this gain is trivial, particularly in view of the higher cost of the newer agents.

(F.S.)

Source: Gotzsche PC. Patients preference in indomethacin trials: an overview. *Lancet* 1989; **1**: 88-90.

Compliance and communication in referrals

AN interesting retrospective analysis has been published of 269 referrals over 14 weeks by a west Belfast practice and the replies received by them from hospitals 20 weeks from the last referral. Fifteen per cent of patients failed to attend the hospital. Significant factors in non-attendance were time to appointment (6% default rate with less than two months to wait but 28% with more than two months) and speciality referred to (11% default rate for surgery referrals compared with 39% to ear, nose and throat and 40% to psychiatry).

The hospital did not reply to 24% of the referral letters which reached them and replies took an average of 17 days (range two to 55 days). Only 19% of non-attendances were notified to the practice. However, the study was confused by the practice's policy of asking the patients to post the letter themselves. Not surprisingly, the hospital did not receive a letter for 41% of the non-attenders. In the case of ear, nose and throat, assuming an equal distribution of patients failing to post the letter, the non-attendance rate for other reasons would be only 24%. Unfortunately the authors attempted to ignore this by suggesting that allowing patients to post letters preserves patient autonomy and increases attendance rates — this is an interesting idea but unproven.

The authors' recommendations to improve compliance include greater involvement of the patient in the decision to refer, better feedback on non-attendance from hospitals and shorter delays to outpatient clinics with appointment reminders for those with long delays. Unfortunately they do not suggest sending the referral letters by internal or external post, which would have cost them £51.11 for all 269 referrals by first class mail, a cost of £3.00 for each of the 17 patients who failed to attend because the hospital did not receive the letter.

(J.A.)

Source: McGlade KJ, Bradley T, Murphy GJJ, Lundy GPP. Referrals to hospital by general practitioners: a study of compliance and communication. *Br Med J* 1988; **297**: 1246-1248.

Pregnancy loss and diabetes

THERE is a longstanding debate over whether diabetes increases a woman's risk of having a spontaneous abortion. To address this question, this study enrolled 386 women with insulin-dependent diabetes and 432 women without diabetes. They were included in the study within 21 days of conception and both groups were followed prospectively.

After adjustment for known risk factors for spontaneous abortion, the rate of abortion was not significantly higher in the diabetic group, most of whom had good metabolic control. However, those diabetics who had spontaneous abortions had significantly higher fasting and postprandial glucose levels in the first trimester than those whose pregnancies continued. For those with an elevated glycosylated haemoglobin in the first trimester, each increase of one standard deviation above the normal range was associated with an increase of 3.1% in the rate of pregnancy loss.

The implication for general practitioners is that discussion about pregnancy and metabolic control must start before conception. There is a real opportunity to help reduce the likelihood of a spontaneous abortion or birth defect and the subsequent distress for their patient.

(V.O.)

Source: Mills JL, Simpson JL, Driscoll SG, *et al.* Incidence of spontaneous abortion among normal women and insulin-dependent diabetic women whose pregnancies were identified within 21 days of conception. *N Engl J Med* 1988; **319:** 1617-1623.

Iron supplements in pregnancy

THE old question of mass iron supplementation of pregnant women is discussed again in two opposing articles.

The problem with the arguments in favour of iron is that the studies performed so far are based on two assumptions. The first is that the physiological norms for iron levels for non-pregnant women can be applied to pregnancy. The second is that studies on selected populations are applicable to general populations. Hemminki and Starfield found little or no evidence of obvious benefit as judged by a large number of clinical outcomes in a review of 17 controlled trials. The iron lost from the stores is mostly used for the increased red cell volume in late pregnancy which reverts to normal after pregnancy. The opposing argument is that the incidence of anaemia in pregnancy is still high in certain groups (for example, 10% of unsupplemented women in Glasgow in 1973) and that iron deficiency in pregnancy may have an effect on infant stores of iron. Folate deficiency has been associated with fetal malformations, premature delivery and pregnancy loss.

Both papers argue for better predictors of women who need iron and folic acid supplements. Serum ferritin level is quoted as the best laboratory indicator of iron stores, but no reasonable sensitive and specific test for folic acid deficiency is available. The point is made by Dr Horn that the cost of mass supplementation would be £3.57 for one pregnancy while the cost of a serum ferritin test and full blood count is £5.80.

Overall these papers suggest that clinical criteria for the need for supplements could be drawn up. From Professor Hibbards' article the criteria for iron supplementation include: previous anaemia, dietary inadequacy, chronic blood loss, borderline haemoglobin (<12 gdl^{-1}) in second half of pregnancy, folic acid treatment. For folic acid supplementation the criteria include: previous obstetric history with conditions associated with folate deficiency, malabsorbtion syndromes, phenytoin treatment, haemaglobinopathies, multiparity, multiple pregnancy, adolescence.

(J.A.)

Sources: Hibbard BM. Iron and folate supplements during pregnancy: supplementation is valuable only in selected patients. *Br Med J* 1988; **297:** 1324-1326. Horn E. Iron and folate supplements during pregnancy: supplementing everyone treats those at risk and is cost effective. *Br Med J* 1988; **297:** 1325-1327.

Why teetotallers die sooner than moderate drinkers

IT is widely accepted, and popularly acclaimed, that non-drinkers as well as heavy drinkers have higher mortality rates than light or moderate drinkers (particularly for cardiovascular causes) — the so-called U-shaped curve. Professor Shaper and his colleagues in the department of clinical epidemiology and general practice at the Royal Free Hospital have conducted further analyses on their British regional heart study data to further elucidate this point. During a mean of 7.5 years there were 504 deaths (52.6% from cardiovascular causes) in 7735 men aged 40–59 years entered into the study in 1978–80. They found that 'ex-drinkers include a higher proportion of men who recall a diagnosis of ischaemic heart disease, high blood pressure or diabetes mellitus and a higher proportion with evidence of ischaemic heart disease on questionnaire or ECG'. They then demonstrated that the U-shaped curve was seen only in men who had cardiovascular-related disorders at the initial interview. The relationship held good after adjustment for age, social class and cigarette smoking. Thus many non-drinkers have a higher risk of death because they already have life-limiting diseases, some of which may have been due to alcohol damage earlier in life.

(F.S.)

Source: Shaper AG, Wannamethee G, Walker M. Alcohol and mortality in British men: explaining the U-shaped curve. *Lancet* 1988; **2:** 1267-1273.

Can chlamydia cause coronaries?

JUST as Professor McCormick was complaining about the over-abundance of agents implicated as causes of ischaemic heart disease (*Lancet* 1988; **2:** 983-986) another has been described. Chlamydia are a well recognized cause of myocarditis and arterial emboli but a recently described species of chlamydia (TWAR) has been investigated in Finland for its role in ischaemic heart disease. A group of researchers in Helsinki compared serum samples from 40 male patients with acute myocardial infarction, 30 male patients with chronic coronary heart disease and 41 controls (matched for sex, age, time and geographical location). They showed highly significant differences in antibody levels between the two groups with ischaemic heart disease and the controls. They also noted a significant seroconversion response in the patients suffering acute myocardial infarction. When deciding upon the importance of these findings it must be remembered that chlamydia TWAR is a frequent cause of pneumonia in Finland (5–10% outside epidemics).

This study does not contradict those which identified the main risk factors in ischaemic heart disease but serves to remind us of the importance of searching for precipitating factors which cause symptoms in already diseased individuals. Much more evidence will be needed before chlamydia are ascribed a causative role in such a common and important disease.

(F.S.)

Source: Saikku P, Leinonen M, Mattila K, *et al.* Serological evidence of an association of a novel chlamydia, TWAR, with chronic coronary heart disease and acute myocardial infarction. *Lancet* 1988; **2:** 983-986.

Psychological distress and the help-seeking behaviour

IT is often assumed that patients who are psychologically distressed use general practitioner services more often and less appropriately than the rest of the population, but this may not be true. In a one year prospective study of 1000 adults chosen randomly in Los Angeles, with follow-up interviews every six weeks, it was found that those who were rated as highly psychologically distressed experienced more physical illness both prospectively and retrospectively than a low distress group: 68% experienced at least one illness during the study period compared with 46% of the low distress group. But an equal number of those illnesses were rated as not needed by a panel of physicians blind to the rating of distress and 37% of visits from both high and low distress groups were rated as inappropriate. Furthermore, the mean time spent in bed per illness episode was 1.3 days for all groups and the level of distress did not affect the percentage of individuals seeking medical care.

The results question the commonly held belief that people who visit their general practitioner for so-called 'trivia' are wasting the doctor's time. However, since these emotionally distressed people suffer more illness, they may have become accustomed to packaging their distress in physical symptoms. Or perhaps they are more distressed because they are more unwell.

The paper raises some important questions about the nature of distress and its associations with help-seeking behaviour. The conclusions cannot be taken as cast iron because the criteria and measures of stress are created by a combination of two distinct measures which could affect the results. It may be that the measures of distress did not measure distress itself but rather psychological strain. However interesting questions have been raised by this paper. (J.A.)

Berkanovic E, Hurwicz ML, Landsverk J. Psychological distress and the decision to seek medical care. *Soc Sci Med* 1988; **27:** 1215-1221.

Violence against GPs

VIOLENCE against the general practitioner has caught the attention of the media in recent months to such an extent that family practitioner committees have gathered information on the subject and are issuing guidelines to doctors. A postal questionnaire sent to general practitioners in the Birmingham area gathered information on verbal abuse and physical injury as well as the number of aggressive attacks, the role of drugs or alcohol, the location and timing, the person responsible, and the times when the general practitioners felt that they were under threat.

Although only a small number of questionnaires were sent, 83 in all, it was shown that significantly more inner city than suburban doctors had suffered attempted injury and that more aggressive incidents occurred within the surgery. Twenty four per cent of doctors had felt under the threat in surgery hours and during evenings on call and 39% had felt under threat when on call at night. Both alcohol and drugs were reported as precipitating factors.

Doctors certainly appear an easy and accessible target and the authors suggest that general practitioners need to plan their services to reduce the risk of violence. (M.K.)

Source: D'Urso P, Hobbs R. Aggression and the general practitioner. *Br Med J* 1989; **298:** 97-98.

INFECTIOUS DISEASES UPDATE

Salmonella in eggs

In 1988 over 13 000 cases of infection by *Salmonella enteritidis* were reported in the UK, two thirds of which were due to phage type 4, a strain which has become endemic in many poultry broiler and egg-laying flocks in the past two to three years. Whereas surveys have shown a salmonella contamination rate of approximately 60% in retail chilled and frozen poultry carcases, it is much more difficult to quantify the extent of infection in shell eggs. More specific research is required concerning the distribution of infection among layer flocks, the incidence of infected birds within flocks, the frequency with which infected birds lay infected eggs as well as the numbers of salmonella organisms present in such eggs.

While it is anticipated that the measures recently announced by the Ministry of Agriculture and Fisheries will make a contribution towards the control of infected flocks, these will take considerable time to take effect. Among other possible control methods, research has shown that irradiating eggs is a feasible proposition in the future, although at present it is illegal to sell irradiated food in the UK.

Meanwhile, the recommendations advising against the consumption of foods to be served cold with raw egg as an ingredient, along with the need to maintain proper standards of kitchen hygiene and good temperature control throughout food preparation, should be followed. (J.C.M.S.)

Yellow fever

Trinidad and Tobago have recently confirmed the presence of yellow fever in mosquitoes in the south east of the island. There have been no human cases there since 1979. Vaccination is recommended for those travelling to rural parts of the country and for those going from Trinidad and Tobago directly to countries asking for certificates of vaccination from travellers recently in infected areas. (E.W.)

Malaria prevention

Advice on preventing malaria can be confusing. There are, however, certain principles upon which most experts agree.

1. Avoiding mosquito bites is the first line of defence and is increasingly important as resistance to drugs spreads. Clothing worn in the evenings should cover as much of the body as possible. Exposed areas can be protected by insect repellent ointments or lotions, applied regularly according to manufacturers' instructions. Netting over windows and beds can help and a portable mosquito net has recently become available. (Approximately £25.00 from Bimoz, tel: 0909 720582.)

2. Prophylactic tablets should be continued throughout exposure and for at least four weeks afterwards, in order to cover the incubation period of *Plasmodium falciparum,* the most dangerous form of the disease. In areas where resistance to drugs is absent or minimal a single drug such as chloroquine or proguanil is normally used. When resistance is well established two drugs are used together, usually chloroquine and proguanil or chloroquine and maloprim. There are inevitably differences of opinion over which is the best combination because precise information on resistance patterns is not available.

3. The third line of defence is to rely on early treatment. Together with avoiding mosquito bites this is sometimes the best approach for those going to areas where the risk of malaria is small and thus the risk of side effects from the drugs may outweigh the risk of the disease. Prophylaxis can fail, and early treatment here again is essential. (E.W.)

Contributed by Dr E. Walker and Dr J.C.M. Sharp, Communicable Diseases (Scotland) Unit, Ruchill Hospital, Glasgow G20 9NB (041-946-7120). Suggestions for topics to include in future updates are welcomed and should be passed to Dr E. Walker from whom further information about the current topics can be obtained.