This month • fat, fish and fibre • practice guidelines • contact lenses • tonsillitis

WEST OF SCOTLAND JOURNAL CLUB

Fat, fish and fibre

HEART disease is one of the commonest causes of death, especially in the west of Scotland, and any research which claims to have an effect on mortality is widely reported in the popular press. Many of you will therefore be aware of this randomized controlled trial of 2033 men under the age of 70 years in Cardiff who had been diagnosed as having had an acute myocardial infarction according to World Health Organization criteria and had made a good recovery. These patients were randomly allocated to groups receiving or not receiving advice on three dietary factors: a reduction in fat intake and an increase in the ratio of polyunsaturated/saturated fat, an increase in fatty fish intake, and an increase in cereal fibre intake. Patients were reviewed over a two year period and the effectiveness of each diet was assessed by looking at any difference in mortality. The results showed that advice on fat was not associated with any difference in mortality and indeed patients given advice on fibre intake had a slightly higher mortality than other subjects although this difference was not significant. Subjects advised to eat fatty fish had a 29% reduction in two year all-cause mortality compared with those not receiving this advice. The two year incidence of reinfarction plus death from ischaemic heart disease was not significantly affected by any of the dietary regimens. This paper suggested, therefore, that a modest intake of fatty fish, approximately two to three portions a week of herring, sardines, kippers, salmon or trout, may reduce mortality in men who have recovered from a previous myocardial infarction.

However, before we all jump on the bandwagon of 'let them eat fish' it is important to remember that the aetiology of ischaemic heart disease is multifactorial and this paper deals only with secondary prevention following a myocardial infarction. While fishmongers may be rubbing their hands in glee, patients may find this an expensive way to remain healthy.

(M K)

Source: Burr ML, Fehily AM, Gilbert JF, *et al.* Effects of changes in fat, fish and fibre intakes on death and myocardial reinfarction: diet and reinfarction trial (DART). *Lancet* 1989; **2:** 757-761.

Do practice guidelines guide practice?

THIS paper could be subtitled 'The consensus statement meets the monster in the black lagoon'. While it refers specifically to obstetric practice in Ontario this paper probably contains some general truths which bear examination. The study describes the attitudes and activities of 122 obstetricians in 85 hospitals before and after the release of a 'widely distributed and nationally endorsed consensus statement recommending decreases in the use of Caesarean sections'. Of the doctors 87–94% were aware of the guidelines, and 82–85% agreed with them.

One third of hospitals and obstetricians reported changes in their practice because of the guidelines and the obstetricians reported reducing their Caesarean section rate by 61–72%. The surveys showed that despite awareness of the recommendations, the knowledge of their content was poor (67% correct responses to the factual questionnaire). Furthermore, discharge data showed that rates of Caesarean section were 15–49% higher than those reported by the obstetricians and that in fact there was little change from the previous (upward) trend of Caesarean section rates.

That doctors' behaviour is sustained by many factors other than science has been amply demonstrated by others (*Int J Tech Assess Health Care* 1988; **4:** 5-26). This paper from Ontario surely dispels any idea that such a 'top-down' approach will have any significant beneficial effects. It is essential that those who would manage doctors more efficiently should involve doctors in the audit process and help them formulate their own solutions to their own acknowledged problems.

(F S)

Source: Lomas J, Anderson GM, Domnick-Pierre K, *et al.* Do practice guidelines guide practice? The effect of a consensus statement on the practice of physicians. *N Engl J Med* 1989; **321:** 1306-1311.

Complications of contact lenses

CONTACT lenses are worn by four million people in the United Kingdom and this editorial and two accompanying papers in *The New England Journal of Medicine* describe the problems that can arise. Eye irritation has been well known to users and opticians for the past 20 years and allergic reactions can also arise. Various cleansing solutions and sterilizing tablets have been marketed to deal with the problems of build-up of deposits and irritation occurs less readily if lenses are removed or replaced frequently.

However, the new extended wear soft contact lenses appear to be associated with a marked increase in the incidence of corneal ulcers. For extended wear lenses worn overnight the relative risk is nine to 15 times that of daily use soft lenses. This complication is quite common with about one in 300–450 extended wear users per year suffering from an ulcerative keratitis. The causes of this may be two-fold — the build-up of contaminating bacteria and residues under the lenses and overnight corneal hypoxia which could damage the epithelium. Irreversible morphological changes in the corneal endothelial cells have been discovered which are similar to those found on ageing.

Checks for corneal damage should therefore be made in patients who wear contact lenses, especially extended wear soft lenses. Prompt treatment may prevent the sight threatening complication of corneal perforations with bacterial invasion of the eye. The general practitioner and optician should review with the patient the reasons for wearing contact lenses for long periods of time. It appears from these papers that in the case of extended wear contact lenses the problems may be too high to justify their use.

(J A)

Sources: Smith RE, MacRae SM. Contact lenses — convenience and complications. *N Engl J Med* 1989; **321:** 824-826. Schein OD, Glynn RJ, Poggio EC, *et al.* The relative risk of ulcerative keratitis among users of daily-wear and extended-wear soft contact lenses: a case-control study. *N Engl J Med* 1989; **321:** 773-778. Poggio EC, Glynn RJ, Schein OD, *et al.* The incidence of ulerative keratitis among users of daily-wear and extended-wear soft contact lenses. *N Engl J Med* 1989; **321:** 779-783.

Enthusiastic treatment of acute tonsillitis

'ENTHUSIASM is infectious'. This study of patients suffering from acute tonsillitis attempted to discover whether treating infections enthusiasti-

cally made any difference to the outcome.

After exclusion of patients with a positive Monospot test for infectious mononucleosis the 100 patients were divided into two groups. Patients in the experimental group were met by the doctor personally who introduced himself. A full ear, nose and throat examination was then carried out in a dark room with a head mirror and otoscope. The patient was given full information about the diagnosis, treatment and prognosis and told that they would feel better in 24 hours. A prescription for penicillin V was handwritten for the patient and a handwritten sick certificate produced if requested. The mean length of consultations for this group was about 10 minutes.

The doctor did not introduce himself to patients in the control group and after a brief examination with a torch and spatula in the ordinary consulting room they were given a pre-printed prescription and a pre-printed certificate, if requested. They were given the briefest details about the diagnosis and were told nothing of progress. The mean length of this consultation was about six minutes.

After two days three measures were made: throat symptoms, effect of treatment and satisfaction with the information given. Twenty five out of the 50 patients in the experimental group and nine out of the 50 in the control group felt 'much better' after two days. In the experimental group 42 patients felt the treatment had helped compared with 28 in the control group. Forty five patients in the experimental group felt they had received sufficient information compared with only 13 of the controls.

Although the study set out to maximize the 'doctor' effect, it is a neat study which reminds me to spend more time with patients suffering from sore throats. Since controversy still rages about whether antibiotics should be prescribed for tonsillitis, the message from this paper is 'Whatever you do for the patient with a sore throat, do it enthusiastically'.

(J A)

Source: Olsson B, Olsson B, Tibblin G. Effect of patients' expectations on recovery from acute tonsillitis. *Fam Pract* 1989; **6**: 188-192.

Contributors: Moya Kelly, Jonathan Anderson, Frank Sullivan, Glasgow.

INFECTIOUS DISEASES UPDATE

Meningococcal vaccination

There is now a tendency to use meningococcal vaccine more often for travellers to Africa. The reason for this is twofold; first, the vaccine is now available on ordinary prescription and is convenient in that it requires only one dose for two to three years' protection against the A and C strains. Secondly, perhaps owing to better international reporting, we have heard of outbreaks not only in the African 'meningococcal belt', stretching from the Gambia in the west across to Ethiopia in the east, but also from further south in Kenya, Tanzania and Zambia. Outbreaks in these other countries do not appear to be confined to the dry season — approximately December through to April in the meningococcal belt. The vaccine is not very expensive (approximately £8 per dose) and it may be reasonable to recommend it for the longer stay traveller or for those intending to mix regularly with local populations. However, it does not give reliable protection to the very young.

(E W)

Oral ulceration in childhood

The major cause of extensive oral ulceration in children under five years of age is gingivostomatitis owing to infection with herpes simplex virus type 1. However, herpes primary infection is often asymptomatic and by adulthood 30% to 100% of individuals will have serological evidence of past infection. While the condition is 'common', individual practitioners see few cases and unfamiliarity may allow misdiagnosis as thrush or bacterial sepsis for example.

After an incubation of two to 12 days, possibly after exposure to cold sores, there is a pyrexial illness often with toxicity. Small fragile vesicles which may never be seen intact, develop on the mucosal surface of the lips, tongue, gums and buccal mucosa. They rapidly ulcerate to reveal shallow 1–4 mm diameter white based ulcers with an erythematous margin. Pain may be associated with refusal to eat and there may be cervical lymphadenopathy. Auto-inoculation can cause cutaneous lesions usually of the face or fingers. The ulceration progresses over four to five days and takes 10–14 days to heal. Oral acyclovir given early in the course of herpetic gingivostomatitis may reduce the duration of ulceration and speed up healing. Complications include febrile convulsions, but the most common worry is dehydration. Unwillingness to drink may be so marked as to require intravenous fluids to be given. A very rare but severe complication is encephalitis. Individuals with eczema are vulnerable to Kaposi's varicelliform eruption, a widespread skin spread of the virus.

Aphthous ulceration which is commoner in older people remains confined to the mouth and is not itself associated with pyrexia or cervical lymphadenopathy. In older individuals the primary infection may be more posterior (tonsils and pharynx) leading to confusion with the ulceration of herpangina (usually owing to coxsackie group A viruses), bacterial tonsillitis/pharyngitis (which are often exudative) or infectious mononucleosis. Associated vesicles on the hands and feet, especially when part of outbreaks, suggest hand, foot and mouth disease. Widespread lesions, usually more bullous than vesicular, suggest Stevens–Johnson syndrome.

Confusion with acute ulcerative gingivitis owing to bacteria may occur, but this tends to affect older individuals and is associated with necrotic areas on the gums. The widespread mucosal ulceration of Vincent's stomatitis is also uncommon, and compared with herpes stomatitis, hallitosis, cervical swelling and systemic upset are more marked.

(P McW)

Influenza

1989 was an unusual year for influenza. A small epidemic was first experienced, as expected, during the late winter and early spring of 1988–89. This was followed by a further outbreak during the summer particularly in Scotland and finally there was an early onset of the 1989–90 epidemic which is still active at the time of writing. The main cause of the current outbreak appears to have been influenza A type H3N2 of a subtype which has been around for several years. All age groups appear to be affected but particularly the young. The common complication of bronchopneumonia has been seen but also the less common myocarditis and Guillain-Barré syndrome. The early onset of this winter's epidemic meant that some of the at-risk groups had not yet been offered immunization.

Recently, 'flu like illnesses' have also been caused by parainfluenza viruses, responsible for cases of croup and laryngitis, and the respiratory syncytial virus, causing infantile bronchiolitis and upper respiratory tract illnesses.

(E W)

Contibutors: Dr P McWhinney and Dr E Walker, Communicable Diseases (Scotland) Unit, Ruchill Hospital, Glasgow G20 9NB (041-946-7120), from whom further information about the current topics can be obtained.