# This month ● influence of TV ● elderly ● potassium supplements ● irritable bowel ● atherosclerosis ● illegitimacy ● rebound insomnia ● atrial fibrillation ● education methods ● ulcers ●

### Imitation of television: conflicting evidence

A recent study by Gould and Shaffer showed that suicides by teenagers in the New York City area increased significantly after the televising of three fictional films about suicide. Using the same methods, however, Phillips and Paight have failed to show any increase in teenage suicides in California and Pennsylvania after the same three films. It could be argued that the imitation of suicide stories is an urban phenomenon but when the California data were reanalysed for the metropolitan areas alone there was still no effect. The data from Pennsylvania suggest that it is not a phenomenon peculiar to the Northeast of America. Furthermore, while it could be an effect of local circumstances in New York, the increase was sufficiently weak as to be obscured when data from all three geographical areas were combined.

The authors caution against Gould and Shaffer's conclusion that fictional television films about suicide 'may have a lethal effect'. Will this latest study receive the same publicity, though, and be remembered in future debates in the UK about imitative behaviour and television?

Sources: Gould MS, Shaffer D. The impact of suicide in television movies: evidence of imitation. N Engl J Med 1986; 315: 690-694. Phillips DP, Paight DJ. The impact of televised movies about suicide: a replicative study. N Engl J Med 1987; 317: 809-811.

### Diagnostic difficulties in the very elderly

A paper in Age and Ageing provides a timely reminder of how atypical presentations can cause diagnostic difficulties when dealing with elderly patients. The study reviewed 100 patients aged 85 years and over admitted with complaints which later fulfilled the accepted diagnostic criteria for myocardial infarction, and compared them with 100 controls aged 65-84 years with the same diagnosis. Chest pain occurred in fewer than half the very elderly, and the triad of pain, typical electrocardiogram (ECG) changes and raised cardiac enzymes in only 24. The older patients had less pain, vomiting and sweating than the younger ones. Acute confusion occurred in 22 and was sometimes the only symptom. Characteristic ECG changes were found in only 75, the rest having previous ischaemic or conductive changes that made interpretation difficult.

There was a higher mortality in the older group in the first four days after admission and it is suggested that they might have benefited from more intensive monitoring at that time (contrary to conventional practice). Otherwise the authors merely suggest that some of the patients might have suffered from inappropriate nursing or therapeutic regimens.

Source: Day JJ, Bayer AJ, Pathy MSJ. Acute myocardial infarction: diagnostic difficulties and outcome in advanced old age. Age Ageing 1987; 16: 239-243.

## Potassium supplements and blood pressure

The relationship between sodium. potassium and blood pressure remains fascinating and poorly understood. A recent paper examined the effect of potassium supplementation on blood pressure. This was a randomized, doubleblind, placebo controlled trial in a small number of patients (37). Nonetheless the findings are of considerable interest. A dose of 48 mmol of potassium daily lowered the blood pressure of mildly hypertensive patients to the same extent that we might expect from our conventional therapies. This effect may be conditional upon there being no simultaneous sodium restriction and at the moment we do not know for how long the effect would be maintained. Watch this space.

Source: Siani A, Strazzullo P, Russo L, et al. Controlled trial of long term oral potassium supplements in patients with mild hypertension. Br Med J 1987; 294: 1453-1456.

#### Irritable bowel syndrome

Dietary supplementation with fibre, often as bran, has become an almost brain-stem response in the management of patients with irritable bowel syndrome. A study from St Bartholemew's Hospital suggests that the beneficial effects of bran in irritable bowel syndrome, especially when associated with abdominal pain, are due to a placebo response which is independent of an increase in stool weight. Twenty-eight patients took part in a double-blind placebo controlled crossover trial of dietary supplementation with either bran biscuits or placebo biscuits. Almost three-quarters of each group improved symptomatically and there was no significant difference between the bran treated and placebo groups. Symptomatic response was independent of increase in stool weight. The patients in this study tended to have more pain and less constipation than is perhaps typical in irritable bowel syndrome but nonetheless these results raise questions about some traditional approaches to management.

This theme is emphasized in an interesting study of hypnotherapy in which a small group of patients with severe intractable irritable bowel syndrome in the University Hospital of South Manchester have been followed up for 18 months. They all remained in remission, with only two having had a single relapse during the follow-up period. Patients most likely to do well with 'gut-directed hypnosis' tend to be younger and have classical irritable bowel syndrome (abdominal pain, abdominal distension and abnormal bowel habit). Older and atypical cases and those with significant psychopathology (assessed on the general health questionnaire) did less well. The technique appears relatively time-consuming, with half-hour hypnosis sessions of decreasing frequency being given over a three-month period; patients were given a tape for daily autohypnosis after the third session. However, this approach may find a place in primary care; indeed, it is possible that the growing number of general practitioners using hypnosis could contribute to this literature.

Sources: Lucey MR, Clark ML, Lowndes J, Dawson AM. Is bran efficacious in irritable bowel syndrome? A double blind placebo controlled crossover study. Gut 1987; 28: 221-225. Whorwell PJ, Prior A, Colgan SM. Hypnotherapy in severe irritable bowel syndrome: further experience. Gut 1987; 28: 423-425.

# Atherosclerosis in Indian populations

Higher than expected morbidity and mortality from atherosclerosis has been reported in two populations of Indian immigrants to London and to Trinidad who do not show the commonly accepted major risk factors: high cholesterol intake or serum cholesterol levels, high rates of smoking, or hypertension. One explanation is the high intake of cholesterol oxides from ghee, a clarified butter product used in Indian cooking. Cholesterol oxides are increasingly implicated in atherogenesis and are formed when cholesterol-containing foods are process-

ed and stored; hence the high levels found in ghee compared with butter, where none are detectable.

Source: Jacobson MS. Cholesterol oxides in Indian ghee: possible cause of unexplained high risk of atherosclerosis in Indian immigrant populations. *Lancet* 1987; 2: 656-658.

#### Illegitimacy

Illegitimacy is on the increase. Of the estimated 797 000 conceptions in England and Wales during 1985, 36% occurred outside marriage compared with 33% in 1984 and 23% in 1975 (fairly startling figures in themselves). However, far from suggesting a rising tide of immorality, the figures give an insight into changing attitudes towards marriage and the stigma of illegitimacy. From 1975 to 1985 the proportion of illegitimate conceptions that were followed by marriage and legitimate maternity fell from 26% to 15%, while the proportion followed by birth of a child registered in the joint names of unmarried parents (indicating a decision to bring up a child in a stable relationship without marriage) rose from 17% to 32%. About three-quarters of joint-registered parents give a single address for registration.

For the under 16 years age group, the conception rate of 8.6 per 1000 in 1985 (a total of 9406) of which 4.8 per 1000 were legal terminations (a total of 5237), has been stable over 10 years, and does not seem to have been affected by the comings and goings of the law courts' various deliberations on the case brought by Victoria Gillick.

The less encouraging aspect of this data is shown in the figures on adoption: there were 7600 in 1985, a decrease of 12% since 1984 and 50% since 1976. This must represent a bleak picture for many childless couples, especially when linked with the recent *British Medical Journal* leader pointing out how ineffective modern methods are for treating infertility.

Sources: Office of Population Censuses and Surveys. Trends in conceptions to women resident in England and Wales: 1975–85. *OPCS Monitor* FM1 87/2. Office of Population Censuses and Surveys. Adoptions in England and Wales notified during 1985 and 1986. *OPCS Monitor* FM3 87/1. Lilford RJ, Dalton ME. Effectiveness of treatment for infertility. *Br Med J* 1987; 295: 155-156.

### Rebound sleep disorder after triazolam

The new benzodiazepines with short elimination half-lives, such as triazolam, are less likely to cause residual daytime sedation than the slowly eliminated flurazepam. On the other hand, abrupt termination of treatment can lead to re-

bound insomnia in the first few nights which is worse than the original insomnia and these symptoms may be distressing enough to lead to continued drug use.

In a double-blind, randomized, controlled trial, 30 subjects taking triazolam 0.5 mg for seven to 10 nights who were abruptly withdrawn from treatment were compared with 30 subjects whose dosage was tapered from 0.5 mg to 0.25 mg for two nights and 0.125 mg for two nights. The abrupt withdrawal group took longer to fall asleep, slept for a shorter time, woke more times during the night and felt less refreshed immediately after withdrawal than before drug treatment started. In the tapered withdrawal group sleep duration and nocturnal awakenings did not vary from pre-treatment baseline during or after the tapering period. Other symptoms were less severe than in the abrupt withdrawal group. The conclusion is that rebound sleep disorder is attenuated by a tapered regimen of triazolam and patients are thus helped in their attempts to discontinue treatment.

Source: Greenblatt DJ, Harmatz JS, Zinny MA, Shader RI. Effect of gradual withdrawal on the rebound sleep disorder after discontinuation of triazolam. *N Engl J Med* 1987; 317: 722-728.

#### Lone atrial fibrillation

Atrial fibrillation is a relatively common condition and most general practitioners associate it with valvular disease of the heart and the need for anticoagulation therapy to prevent strokes. A 30-year longitudinal study of 97 patients in the USA provides fresh information on 'lone artrial fibrillation', where the patient has no clinical evidence of metabolic or cardiovascular disease. Doctors tend to assume that the risk of embolism with lone atrial fibrillation is high and treat with anticoagulants. Kopecky and colleagues provide data which challenges the justification for this policy in patients under 60 years old. The risk of thromboembolism in this population was low at 0.55 per 100 patient-years and there was no significant difference in survival between the group with isolated atrial fibrillation and an unselected regional population with the same age and sex distribution. When the complication rate of anticoagulant therapy can be as high as 3 to 5 events per 100 person-years, general practitioners have a responsibility to establish why patients are in atrial fibrillation before embarking on prolonged courses of therapy.

Source: Kopecky SL, Gersh BJ, McGoon MD, et al. The natural history of lone atrial fibrillation. A population-based study over three decades. N Engl J Med 1987; 317: 669-674.

#### Learning and teaching

William Osler wrote in 1925: 'undoubtedly the student tries to learn too much, and we the teachers try to teach them too much - neither, perhaps, with great success'. We are no more certain about the best ways to teach medicine today. Professor Bordage from Quebec has developed an important theory of learning, using 'prototypes' or representative exemplars of medical disorders; for example, pneumonia is more typical of respiratory disorders than hydrothorax. In this paper he has tested his theory that the formation of prototypes in the long term memory of medical students is more likely to occur: (1) if the number of topics or disorders presented in the courses is limited and typical instances are emphasized rather than broad ones (for example, a few key causes of dyspnoea rather than all 20 or 30 causes listed in textbooks) and (2) if the materials presented represent intermediate level concepts or disorders (for example, angina pectoris rather than ischaemic disorders, which are too general, or Gairdner's disease, which is too specific).

His findings confirm the educational advantages of using prototypes rather than attempting to teach everything at once; students are able to create strong anchor points in their memories on which future experiences can be built. In Osler's words again, 'if you know syphilis, you know medicine'.

Source: Bordage G. The curriculum: overloaded and too general? *Med Educ* 1987; 21: 183-188.

#### NSAID not a risk for ulcers

A report in *The Lancet* has challenged the belief that non-steroidal antiinflammatory drugs cause gastric or duodenal perforation. Use of nonsteroidal anti-inflammatory drugs did not measurably affect hospital admission rates for 54 patients with well-documented perforated peptic ulcers. On the other hand. use of antacids or cimetidine was strongly predictive of perforated ulcer. Furthermore, analysis of time trends for this group showed that although the use of non-steroidal anti-inflammatory drugs rose more than four times between 1977 and 1983, the frequency of hospital admission for perforated ulcer remained constant over this period.

The authors believe that previous studies showing an association between use of these drugs and perforated ulcer have relied solely on clinical notes which may perpetuate clinical impressions.

Source: Jick SS, Pereira DR, Walker AM, Jick H. Non-steroidal anti-inflammatory drugs and hospital admission for perforated peptic ucler. *Lancet* 1987; 2: 380-382.