

GP's often fail to give early parenteral benzylpenicillin in suspected meningococcal infection

EDITOR.—Recent national guidelines and communications from the chief medical officer have emphasised the importance of early benzylpenicillin in the management of suspected invasive meningococcal disease.¹ Such action may prove life saving.² The only contraindication for the use of benzylpenicillin in such circumstances is anaphylaxis after previous treatment with penicillin.¹

In a recent study Colbridge *et al* found that 85% of general practitioners carried benzylpenicillin in their emergency bags.³ In Rotherham the local medical audit advisory group recently conducted an audit which found that 107 of 114 general practitioners carried benzylpenicillin in their emergency bags. Unfortunately, carriage of benzylpenicillin does not equate with its use when required.⁴

Between 8 December 1995 and 11 January 1996 an outbreak of meningococcal septicaemia occurred in Rotherham.⁵ General practitioners saw five of the patients before their admission to hospital. Parenteral benzylpenicillin was given to one of these patients. In one case benzylpenicillin was not given because a different diagnosis was considered, and in another case the patient referred himself to hospital. In seven cases of suspected invasive meningococcal infection that occurred in Rotherham during the following six weeks parenteral benzylpenicillin was given by general practitioners to only one patient despite increased awareness of the condition. In one of these cases the admitting doctor, from a deputising agency, reported that the antibiotic had not been in the emergency bag.

This experience emphasises, yet again, the need for general practitioners to be regularly reminded to give parenteral benzylpenicillin in cases of suspected meningococcal infection in accordance with the chief medical officer's advice and national guidelines.¹ It also highlights the fact that deputising agencies should ensure that benzylpenicillin is routinely carried in emergency bags given to their deputising doctors.

DAVID IRWIN

Consultant in communicable disease control

JAMES M MILLER

Senior registrar in public health medicine

S JOHN CORNELL

Registrar in public health medicine

Rotherham Health Authority,
Rotherham S5 2QU

1 Chief Medical Officer. Meningococcal infection. *CMO Update* 1995;7:2.

2 Cartwright K, Reilly S, White D, Stuart J. Early treatment with parenteral penicillin in meningococcal disease. *BMJ* 1992; 305:143-7.

3 Colbridge MJ, Bailey GG, Dunbar EM, Ong ELC. Antibiotics carried in general practitioners' emergency bags. *BMJ* 1995; 310:29-30.

4 Wood A, O'Brien S. Antibiotics carried in general practitioners' emergency bags. *BMJ* 1995;310:737.

5 Communicable Disease Surveillance Centre. Meningococcal disease in England and Wales: outbreak due to serogroup C 2b. *Commun Dis Rep CDR Wkly* 1996;6:17.

Admissions due to overdoses of aromatic analgesics have increased in Scotland

EDITOR.—Philip McLoone reports considerable inequalities in suicide rates in Scotland.¹ The largest increases among men in deprived areas were in the rates of self poisoning, and McLoone suggests that restricting the availability of drugs used for self poisoning might reduce deaths by suicide. We have reported previously on the increase in the absolute number of admissions due to parasuicide in Scotland² and have subsequently examined the

nature of this increase. Our findings are relevant to McLoone's suggestion.

In Scottish hospital records the diagnosis of self poisoning can be entered in any one of six diagnosis fields. For completeness, records were extracted if self poisoning was mentioned in any of the fields. Figure 1 shows that the number of admissions related to parasuicide by ingestion of aromatic analgesics (mainly paracetamol) has increased in Scotland, in line with earlier findings in England.³ The admissions comprise all those for which each drug was entered in any position on the SMR1 discharge form, to exclude potential bias from preferential recording of paracetamol in first position because of clinical concern.

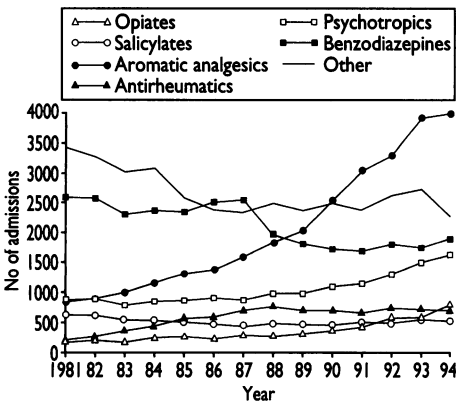


Fig 1—Emergency admissions for deliberate self poisoning by type of substance, Scotland, 1981-94

The rate of overdose of aromatic analgesics in males aged 15-24 increased from 31/100 000 in 1981 to 149/100 000 in 1994, and the rate in those aged 25-34 increased from 26/100 000 to 126/100 000. The figures for females were 58/100 000 increasing to 260/100 000 in those aged 15-24 and 32/100 000 increasing to 153/100 000 in those aged 25-34.

Trends in parasuicide and suicide among females continue to diverge.⁴ The link between changes in the epidemiology of suicide and of parasuicide is unclear. We are examining a cohort of 8304 people discharged from Scottish general hospitals in 1981 after parasuicide (*International Classification of Diseases* codes E950-959), who were followed up for 13 years by record linkage. In each age group a higher proportion of males than females went on to complete suicide. In those aged 25-34, for example, 1.4% of the women but 4.4% of the men died by suicide during the 13 years. Further review of these data and the addition of further cohorts will help to identify changes in the relation between suicide and parasuicide over time.

The morbidity and mortality resulting from overdoses of aromatic analgesics require further examination. Public health measures as suggested by McLoone and by Gunnell *et al*,⁵ such as a limit on the number of paracetamol tablets sold at one time, deserve further consideration.

S HAGEN

Epidemiologist

Department of Public Health,
University of Aberdeen,
Aberdeen AB9 1FX

Crichton Royal Hospital,
Dumfries DG1 2SD

Ayrshire and Arran Health Board,
Ayr KA7 4DW

Argyll and Clyde Health Board,
Paisley PA1 1DU

D HALL
Consultant psychiatrist

C STARK

Consultant in public health medicine

H SMITH

Consultant in public health medicine

- 1 McLoone P. Suicide and deprivation in Scotland. *BMJ* 1996; 312:543-4. (2 March.)
- 2 Stark C, Smith H, Hall D. Increase in parasuicide in Scotland. *BMJ* 1994;308:1569-70.
- 3 Hawton K, Fagg J. Trends in deliberate self-poisoning and self-injury in Oxford, 1976-90. *BMJ* 1992;304:1409-11.
- 4 Lester D. Suicide and parasuicide in Scotland. *Perceptual and Motor Skills* 1995;80:862.
- 5 Gunnell D, Frankel S. Prevention of suicide: aspirations and evidence. *BMJ* 1994;308:1227-33.

Children with an avulsed tooth may need antibiotic prophylaxis against bacterial endocarditis

EDITOR.—In their editorial on the emergency management of children with an avulsed tooth Anthony S Blinkhorn and Iain C Mackie mention prophylactic antibiotics.¹ Children with a congenital cardiac abnormality require special consideration—for example, a 10 year old with an avulsed tooth might be given amoxycillin 250 mg three times daily as routine prophylaxis but require a dose of 1.5 g if at risk of bacterial endocarditis.²

One study showed a 61% incidence of bacteraemia in children after the extraction of two to four permanent teeth that were not diseased.³ A cardiac defect is the commonest congenital abnormality. The development of bacterial endocarditis in a child with a small ventricular septal defect may represent a life threatening complication of a previously asymptomatic abnormality. There is evidence of incomplete awareness among parents of the need for prophylaxis against bacterial endocarditis.⁴ When presenting to an accident and emergency department with their child, parents may not appreciate that traumatic avulsion of a tooth and its replantation by a doctor necessitate the same prophylaxis as treatment in a dentist's surgery, particularly if they are preoccupied with a cosmetic defect. The doctor in the minor injuries area of the accident and emergency department may concentrate on the presenting injury without being aware of the child's other medical problems.

The assessment of any child with an avulsed tooth should include a check to see whether prophylaxis against bacterial endocarditis is required. If it is, treatment will be guided by the relevant recommendations on antibiotic prophylaxis.

DANIEL WALLIS

Senior registrar

Accident and Emergency Department,
Newham General Hospital,
London E13 8RU

SUSAN MATTHAI

Senior registrar

Accident and Emergency Department,
Alder Hey Children's Hospital,
Liverpool L12 2AP

1 Blinkhorn AS, Mackie IC. My child's just knocked out a front tooth. *BMJ* 1996;312:526. (2 March.)

2 Alder Hey book of children's doses. 6th ed. Liverpool: Royal Liverpool Children's Hospital (Alder Hey), 1994.

3 Peterson LJ, Peacock R. The incidence of bacteraemia in pediatric patients following tooth extraction. *Circulation* 1976;53:676-9.

4 Cetta F, Bell TJ, Podlecki DD, Ros SP. Parental knowledge of bacterial endocarditis prophylaxis. *Pediatr Cardiol* 1993;14: 220-2.

Advance directives are compatible with good medical practice

EDITOR.—Bromley division of the BMA believes that advance directives are incompatible with good medical practice and ethics.¹ I disagree strongly with this view.

Good medical practice requires doctors to advise patients of treatment options (including no treatment at all) and the likely outcomes. Patients may then choose the treatment most acceptable to them. This may be not the treatment that produces the best medical