duces reactive hyperaemia, and catastrophic release of antigen into the circulation may occur. If further exposure to antigen is harmful during established anaphylaxis (which is not always the case) a tourniquet may be harmful. The compression bandage technique used in first aid for envenomation,[3] which localises venom, does not damage tissue, and does not lead to deterioration on removal may be more suitable.

Jonathan O'B Hourihane and John O Warner emphasise that in patients with previous reactions the history is crucial, not of "little value." I stated that "the history is of vital importance." But attributing the cause of anaphylaxis to drugs on the basis of previous exposure is not valid and has led to fatal second reactions. I note that these authors regard laryngeal oedema as life threatening, whereas L C Luke does not.

R Alexander and colleagues (in contrast to Luke) suggest that anaphylaxis should always be treated with intravenous adrenaline. This is nonsense. The efficacy of early subcutaneous or intramuscular adrenaline is evident in those who self administer it. When venous access is not obtainable in adults or children other routes are satisfactory. Ventricular arrhythmias are more likely with intravenous use, and in the absence of electrocardiographic monitoring hypotension due to arrhythmias may not be detected and more adrenaline may be given. I do not, as John Clear and colleagues say I do, advocate withholding adrenaline until monitoring is in place. If there is no electrocardiographic monitoring, intramuscular adrenaline is safer for the reason given above and the added risk of infarction and cerebral haemorrhage.

Alexander and colleagues further advocate intraosseous injection in children and nebulised adrenaline. There is no evidence that either is more effective than intramuscular injection (including in the reference cited), and both techniques have practical difficulties. The authors' advocacy of halothane rather than isoflurane is illogical. Halothane is getting hard to find, has not been shown to be superior to isoflurane, and increases the risk of ventricular arrhythmias with adrenaline.

MALCOLM FISHER
Head, intensive therapy unit

Royal North Shore Hospital,
St Leonards,
NSW,
Australia

1 Treatment of acute anaphylaxis [letters]. *BMJ* 1995;311:1434-6. (25 November.)
2 Fisher M. Treatment of acute anaphylaxis. *BMJ* 1995;311: 731-3. (16 September.)
3 Sutherland SK, Coulter AR, Harris RD. Rationalisation of first aid measures for elapid snakebite. *Lancet* 1979;ii:183-6.

### Patients should be taught how to inject adrenaline

EDITOR,—Although no clear consensus has yet emerged about the place of adrenaline injections in the treatment of children with acute allergy,[1] it is incontrovertible that families must be shown how to use any device that is prescribed. In the past two months 12 children have been referred to our clinic with presumed allergy to peanuts. Eight had already been prescribed adrenaline (Min-I-Jet (three) or Epipen (five)), but only one family had received any training. In six cases neither a parent nor the child had been shown; in the remaining case the child but not the parents had been instructed.

Doctors have a responsibility to ensure that patients know how and when to take any medicine prescribed. This does not usually present a problem when medicines are taken by mouth (although timing and the relation to food can be important). For drugs given by injection—particularly a dangerous drug like adrenaline—it is plainly inadequate to issue a prescription with no demonstration. Further training is needed before a child comes to harm.

HUGH DAVIES
Consultant paediatrician
JULIE HARRIS
Allergy nurse specialist
ABBAS KAKOO
Paediatric senior registrar

Paediatric Allergy Clinic,
St Mary's Hospital,
London W2 1NY

1 Treatment of acute anaphylaxis [letters]. *BMJ* 1995;311:1434-6. (25 November.)

## "Jumping beans" are almost identical with medicines

EDITOR,—The ingestion of medicines by young children is an important problem in Britain and leads to many of them attending accident and emergency departments and needing admission to hospital. Six to 10 deaths each year in children aged under 10 are due to poisoning by medicinal agents.[1]

Recently, "jumping beans," which can be bought from local shops, were distributed to children aged 4 to 6 at a party. The capsule of each "bean" dissolves easily in water and releases a 5 mm ball bearing; the lower row in figure 1 shows the beans and the ball bearing. The upper row in the figure shows the orange-white capsules of phenytoin (100 mg) and the magenta-yellow capsules of amoxycillin (500 mg).

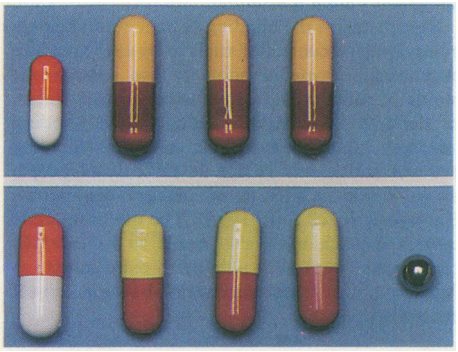

**Fig 1**—*Capsules of phenytoin and amoxycillin (top) and "jumping beans" and ball bearing (bottom)*

The prevention of accidents due to the ingestion of medicines primarily requires the education of both parents and children, and it is therefore inappropriate that toys that clearly contradict guidelines are readily available. The message from these "beans" is that playing with "medicines" is acceptable; this is one of the follies of commerce.

MARTIN HEWITT
Consultant paediatrician

Queen's Medical Centre,
University Hospital,
Nottingham NG7 2UH

1 Office of Population Censuses and Surveys. *Mortality statistics: childhood.* London: OPCS Surveys, 1993.

## Women doctors' use of hormone replacement therapy

### High prevalence of use is not confined to doctors

EDITOR,—A J Isaacs and colleagues report high rates of use of hormone replacement therapy among a sample of women doctors.[1] They note the relative paucity of information regarding the prevalence of use and remark that this high rate among female doctors may "presage more widespread use in the general population."

We carried out a survey of use of hormone replacement therapy among women attending the Oxfordshire NHS breast screening programme between November 1994 and November 1995. Women aged 50-64 who are registered with a general practitioner are routinely invited to attend for screening. A random sample of 2291 women were sent a self administered questionnaire with their invitation to attend for screening and were asked to bring the completed questionnaire with them to their screening appointment. Altogether 1707 (75%) of the women invited for screening attended and 1388 (81%) of these completed the questionnaire. Overall, 591 of the 1388 respondents (43%) had ever used hormone replacement therapy; 409 were using it currently and 200 had used it for five or more years. Table 1 shows the proportions of current and ever users by age for women aged 50-64. The prevalence of current use fell greatly with age, from 38% at age 50-54 to 17% at age 60-64. A significant trend with age was apparent for ever use.

**Table 1**—*Prevalence of use of hormone replacement therapy by age in women attending for breast screening in Oxfordshire (figures are percentages (numbers))**

| | Current use† | Ever use‡ |
|---|---|---|
| Age group (years): | | |
| 50- | 38 (194/504) | 51 (258/504) |
| 55- | 31 (120/388) | 46 (180/388) |
| 60-64 | 17 (61/361) | 28 (102/361) |

*86 Women were aged <50 or >64 at screening; 49 values were missing.
Test for trend: †$\chi^2$=45·68 (1 df), P<0·00001; ‡$\chi^2$=42·76 (1 df), P<0·00001.

Oxfordshire may not be representative of Britain as a whole, and women participating in breast screening are of higher social class and are generally more health conscious than those who decline screening.[2] Nevertheless, this population based study provides evidence that the use of hormone replacement therapy is more widespread than previously reported and suggests that a high prevalence of use is not confined to female doctors.

EMILY BANKS
Clinical research fellow
BARBARA CROSSLEY
Research officer

Imperial Cancer Research Fund,
Cancer Epidemiology Unit,
Radcliffe Infirmary,
Oxford OX2 6HE

RUTH ENGLISH
Consultant radiologist

Breast Care Unit,
Oxford Radcliffe NHS Trust,
Oxford OX3 7JH

ANN RICHARDSON
Senior lecturer

Department of Public Health and General Practice,
Christchurch School of Medicine,
New Zealand

1 Isaacs AJ, Britton AR, McPherson K. Utilisation of hormone replacement therapy by women doctors. *BMJ* 1995;311: 1399-401. (25 November.)
2 Alexander FE, Anderson TJ, Brown HK, Forrest APM, Hepburn W, Kirkpatrick AE, *et al.* The Edinburgh randomised trial of breast cancer screening: results after 10 years of follow-up. *Br J Cancer* 1994;70:542-8.

### May be to enable them to cope with demands of their job

EDITOR,—A J Isaacs and colleagues suggest that women doctors have a relatively high rate of use of hormone replacement therapy.[1] Women doctors do seem to be ahead of an increasing trend for women to take such therapy, but they are perhaps not as far ahead as the authors' review of the literature indicates.

A study of use of hormone replacement therapy