

1990). Only five people had used condoms on every occasion and eight people had not used them at all. In my clinic I have been asking girls who have had sex with strangers abroad how often they were able to persuade their partners to use condoms—or even withdrawal. I have so far reached zero out of seven. Although all the girls had asked the men to use condoms, they had refused, and the girls, all of whom had been drinking, then acquiesced after varying degrees of pressure. At least one is now positive for antibodies to HIV. I also see men who work in Africa on tours of duty lasting 6-12 months. Many have African girlfriends and are amazed when I tell them that the likelihood of the girls being positive for antibodies to HIV might be as high as 50%. Most of these men have wives and families in Britain.

As far as I am aware the only propaganda to the effect that sex abroad is dangerous is the posters at airports reminding preoccupied travellers that AIDS does not go on holiday. Warnings should be directed at business travellers as well as holiday makers, should draw attention to the risks of alcohol in reducing vigilance, and should point out that HIV infection is now more prevalent in most travel destinations than it is in Britain. Almost all our European neighbours have a greater prevalence of HIV, as do cities such as Bangkok and Rio de Janeiro, whose attraction for many visitors is readily available sex. Eastern Europe probably has a massively underestimated problem, and the position in Africa is already apocalyptic. Failure to confront these issues adequately is likely to have catastrophic consequences because although the number of cases of AIDS among those in the traditional high risk groups is tending to plateau, the number of cases in which AIDS is acquired heterosexually while travelling continues to grow exponentially.

C J ELLIS

East Birmingham Hospital,  
Birmingham B9 5ST

1 Communicable Disease Surveillance Centre. Acquired immune deficiency syndrome: United Kingdom, 1982-August 1990. *Communicable Disease Report* 1990;No 36.

## The epidemiology of malpractice

SIR,—In his editorial on malpractice in the United States Dr Richard Smith expresses regret that Britain has no similar statistics.<sup>1</sup> We hope that the government, now that it is accepting liability for indemnity, will produce figures for this country.

The figures, however, would be quantitative and of no value to doctors except to increase alarm; to take preventive action a breakdown of medical causes is needed. We made a modest attempt at this by publishing an audit of 100 actions selected at random from the files kept in the legal department at the West Midlands Regional Health Authority.<sup>2</sup> In 16 cases the "adverse events" were due to minor unavoidable risks of treatment and in 39 they resulted from natural causes—not surprising as legal aid is granted by a panel of lawyers without a doctor on it. Contributory factors were failure of communication in 27 cases (16 of which might have been avoided by doctors talking to patients) and the attitude or personality of the patient in 20. After three years 73 actions had been withdrawn, many being non-runners from the start (each cost the health authority about £12 000 and the tax payer from £7500 to £40 000 because of legal aid expenses); 12 had been settled out of court; one was lost in court by the plaintiff; and 14 were pending, seven of which were due to definite negligence.

The files at the regional health authority are the best and only unselected source of what is happening at the hospital level as letters from plaintiffs' solicitors are directed to the regional

solicitor and, in West Midlands region, all records are kept in one department as the solicitor is employed full time. Studies providing a medical breakdown are continuing. Allegations against doctors increased from 388 in 1986 to 475 in 1988, and certain trends were noted: requests to receive hospital records—without mention of the complaint—increased, many being because of speculative litigation; inquiries about deaths rose greatly and were sometimes precipitated by the cursory handling of the bereaved that can occur in a busy hospital; more people complained about minor procedures such as a haematoma after venepuncture; there was an appreciable decrease in actions against surgeons (surgeons may be finding more time to discuss the operation beforehand, mentioning unavoidable complications such as minor wound infection); and allegations of unwanted pregnancy decreased, probably because the Department of Health and medical defence bodies decided in 1985 that women should be told of the slight risk of failure of sterilisation and that this fact should be put on consent forms, which suggests the need to make these forms more informative in other specialities.

Allegations of malpractice in this region are successful in about 16% of actions. But these figures cannot be compared with the high ones in the United States as obvious non-runners are excluded there because American lawyers operating the contingency fee system obtain an expert medical opinion before taking on a case.

CLIFFORD HAWKINS  
IAN PATERSON

West Midlands Regional Health Authority,  
Birmingham B16 9PA

1 Smith R. The epidemiology of malpractice. *BMJ* 1990;301:621-2. (29 September.)

2 Hawkins C, Paterson I. Medicolegal audit in the West Midlands region: analysis of 100 cases. *BMJ* 1987;295:1533-6.

## Low level exposure to lead

SIR,—Professor W R Lee and Dr M R Moore<sup>1</sup> did not mention that low level exposure to lead can result in hypertension.<sup>2,3</sup> Europeans and North Americans have differing attitudes to the relation between lead and hypertension. Europeans tend to be uncritically dismissive and trivialise the relation, whereas North Americans uncritically embrace the association and consider that it has an appreciable impact on public health.<sup>4</sup> Despite these cultural differences the evidence strongly points to a causal link between low levels of lead exposure and raised blood pressure, with the physiological mediators of stress—that is, catecholamines, etc—playing a critical part.<sup>5,6</sup>

The views of Professor Lee and Dr Moore disagree with those expressed in the 1988 report of the Medical Research Council advisory group on lead and neuropsychological effects in children.<sup>7</sup> This report makes only weak and vague conclusions. It is not so bold as to dismiss a causal relation outright but does leave an overall impression that if the relation exists at all it is minor and trivial. As far as I know the Medical Research Council has not even addressed the issue of low level lead exposure and hypertension. This dismissive attitude to potential effects of low level lead exposure by a British government agency with a national overseer role is in direct contrast with the climate in the United States, where this issue seems to have been reviewed ad nauseam. Where does the balance lie?

DAN S SHARP

Medical Research Council,  
Cardiff CF2 3AS

1 Lee WR, Moore MR. Low level exposure to lead. *BMJ* 1990;301:504-6. (15 September.)

2 Various authors. Papers from symposium on lead-blood pressure relationships. *Environ Health Perspect* 1988;78:3-155.

3 Sharp DS, Becker CE, Smith AH. Chronic low-level lead exposure: its role in the pathogenesis of hypertension. *Medical Toxicology* 1987;2:210-32.

4 Pirkle JL, Schwartz J, Landis JR, et al. The relationship between blood lead levels and blood pressure and its cardiovascular risk implications. *Am J Epidemiol* 1985;121:246-58.

5 Sharp DS, Osterloh J, Becker CE, et al. Elevated blood pressure in treated hypertensives with low-level lead accumulation. *Arch Environ Health* 1989;44:18-22.

6 Sharp DS, Benowitz NL, Osterloh JD, et al. Influence of race, tobacco use, and caffeine use on the relation between blood pressure and blood lead concentration. *Am J Epidemiol* 1990;131:845-54.

7 Medical Research Council advisory group on lead and neuropsychological effects in children. *The neuropsychological effects of lead in children: a review of the research 1984-1988*. London: Medical Research Council, 1988.

AUTHOR'S REPLY.—Dr Dan S Sharp draws attention to hypertension as another outcome of low level exposure to lead. One of us (Dr M R Moore) was a member of the Glasgow group that first identified an association between low level exposure to lead and hypertension.<sup>1</sup> The British regional heart study, however, has shown that lead is a relatively minor contributor to hypertension.<sup>2</sup>

We do not agree that our views "disagree with those expressed in the 1988 report of the Medical Research Council advisory group on lead and neuropsychological effects in children." Rather, we reviewed the evidence that has been published since, pointing out the reasons why opinion seems to be moving toward accepting a causal relation, albeit small. If there is a relation then it could have profound implications. The cost of progressive abatement of lead exposure would rise alarmingly, though the perceived benefit may be relatively small compared with benefits from attention to other remediable causes of hypertension.

In the United States there is a strong impetus to proceed with lead abatement because of the association with hypertension, and there is at least as much attention given to lead as to the other possible causes. Are they trying to achieve the right result in the wrong sequence?

Dr Moore is now two years into an investigation to evaluate the effects of lead exposure, and we hope that in the future we shall be able to take a more balanced outlook than that currently taken by some protagonists.

W R LEE

University of Manchester,  
Manchester M13 9PT

1 Beevers DG, Erskin E, Robertson M, et al. Blood lead and hypertension. *Lancet* 1976;ii:1-3.

2 Pocock SJ, Shaper AG, Ashby D, Delves T, Whitehead TP. Blood lead concentration, blood pressure, and renal function. *BMJ* 1984;289:872-4.

## Three types of erythromelalgia

SIR,—Dr Andrew J Carmichael and colleagues question our proposed classification for erythromelalgia.<sup>1,2</sup>

The symptoms of painful red feet and ankles with sparing of the toes that they describe are not characteristic of erythromelalgia associated with thrombocythaemia. Moreover, true erythromelalgia causally related to thrombocythaemia is ruled out by the absence of microvascular thrombotic lesions in skin biopsy specimens and by the ineffectiveness of aspirin. Therefore the unclassifiable condition in these two patients resembles secondary erythromelalgia.<sup>3</sup>

Dr Carmichael and colleagues also challenge the association of the conditions such as thromboangiitis obliterans, atherosclerosis, and other vascular diseases with secondary erythromelalgia because a "warm skin is an integral part of the erythromelalgia triad." From a semantic point of view the authors' remark is justified. The link has, however, repeatedly been reported,<sup>3,5</sup> and we therefore considered it justified to rank these