

streptokinase in clearing pulmonary emboli, it is surprising that the group do not discuss the possibility that an effect on venous thromboembolism might account for their haemodynamic findings and for part of the favourable effect on mortality. Finally, there was a definite and inexplicable difference in the size of the heart at six months between the groups, fewer of the patients given lytic treatment having enlargement of the heart.

The study group is to be commended for its ability to mount such a trial, but the low randomisation rate, the uncertainty about the comparability of the two groups, and the clinical and laboratory complexities inherent in any effective and well-controlled lytic regimen will limit the practical impact of the study on doctors caring for patients with acute infarction. If, however, the mechanisms which underlie the apparent effect of streptokinase on mortality—and especially on late mortality—can be discovered and can be produced by less demanding regimens, then a real advance will have been made.

¹ Fearnley, G R, *Fibrinolysis*. London, Arnold, 1965.

² Mitchell, J R A, in *Advanced Medicine*, 14th edn, ed D J Weatherall, p 228. Tunbridge Wells, Pitman Medical, 1978.

³ Dewar, H A, Horler, A R, and Cassells-Smith, A J, *British Medical Journal*, 1961, **2**, 671.

⁴ Frantoni, J C, Ness, P, and Simon, T L, *New England Journal of Medicine*, 1975, **293**, 1073.

⁵ European Collaborative Study, *Lancet*, 1975, **2**, 624.

⁶ European Cooperative Study Group for Streptokinase Treatment in Acute Myocardial Infarction, *New England Journal of Medicine*, 1979, **301**, 797.

Privacy, epidemiology, and record linkage

The vast publicity given to the unexpected and serious side effects of practolol testified to the extent of public interest in toxicity from drugs as well as industrial chemicals. That incident also showed that, despite exhaustive tests in animals and a national reporting system, a serious adverse effect to a new drug may occur on a substantial scale before it is recognised. Indeed, extrapolation from in vitro tests and animal studies to man seems likely always to be fallible. Nor, with the present body of theoretical knowledge, can we accurately predict the occurrence and incidence of toxic effects in man to a given chemical. For the foreseeable future, the best safeguard will be the collection of reliable data on exposure to chemical agents of all kinds and illness in man.

This implies record systems that make possible the linkage of information into personal cumulative files—because records on exposure and on illness are often widely separated in time and usually stored in different places. The creation of such files often meets with vigorous opposition on the grounds that the individuals concerned have not consented to the use of information about them for this purpose, or that the existence of such files may place unacceptable power and opportunity for abuse in the hands of the custodian—particularly if this should be a government department.

The National Cancer Institute of Canada recently sponsored a workshop to mark the retirement of H B Newcombe, the originator of an ingenious and effective method of linking personal records by computer. In Canada a computer-based index of deaths for the last 27 years is available (under stringent safeguards for privacy) for linkage with data about exposure of individuals to various agents. The workshop was

shown preliminary results of the use of this file. A hypothesis that isoniazid is not carcinogenic was tested by linking the files of 64 000 people treated for tuberculosis since 1952 with the mortality data, and the scope of the system for environmental monitoring was shown by extracting and linking the occupational records of a 10% sample of the Canadian work force. In the United States a computer-based index of about 20 million deaths each year will be available for epidemiological research from the beginning of 1980.

What of the fears about privacy? One outstanding feature of the workshop was its session on this theme, with contributions from a judge of the Supreme Court of Ontario, a trade union official, and a civil servant. Though there were differences in emphasis, all the participants thought that rigorous safeguards for privacy could be provided without putting epidemiological research in chains. A contributor from the United States said that pressure was growing in Congress to remove some of the obstacles that the Privacy Act of 1974 had placed in the way of the solution of environmental health problems by epidemiological means.

Here in Britain H B Newcombe's method of record linkage has been applied successfully for many years in the Oxford Record Linkage Study and in Scotland. The Office of Population Censuses and Surveys uses a manual method of record linkage in its 1% longitudinal study and for following cohorts of people in respect of death and the development of cancer. All are yielding useful results, though in the OPCS cancer study the sample size is too small to help much in monitoring the effects of environmental chemicals. It would be ironical if these systems—which have helped to keep Britain in the van of epidemiological research—were threatened by the current financial cuts or by a restrictive Data Protection Act, when in North America similar systems are now beginning to receive priority and satisfactory solutions to the issues of privacy may be at hand.

Creeping spurge

Not everyone will know what creeping spurge is: could it be a progressive paralysis of sheep, or perhaps a term used in Scotland for misty drizzle? In fact, it is one of the common names for *Euphorbia myrsinites*, a plant of Mediterranean origin which now creeps around greenhouses and rock gardens throughout the United States. When broken, its thick central stem exudes a milky latex. Children like to play with this sap and to rub it into their skin and on their toys; and in so doing they can cause some spectacular eruptions.

The reactions in a recent North American epidemic¹ were so fierce that the patients turned up at a poisoning control centre rather than at a skin clinic. Alarming swellings and blistering, usually on the face, appeared from two to eight hours after exposure, and mostly cleared over the next four days. Twenty patients with reactions to spurge were seen over three years and Spoerke and Temple¹ believe that many additional cases were missed through lack of familiarity with the clinical picture—but this is always a problem with plant reactions. Indeed, how many doctors (let alone members of the public and their children) are familiar with the 4000 or so species of spurges (*Euphorbia* spp)? Many of these are common weeds living inconspicuously in the general greenness of the countryside. Most contain a milky sap which may be highly irritant, and this property has been used for purposes as