

They can also comment on area plans for the Service, including such things as hospital closures. Hospital waiting lists and visiting times are another legitimate interest and the councils can inspect clinics, health centres, and hospitals as well as look at domiciliary services. This gives their 20 or so members, appointed largely by local authorities and voluntary organizations, quite a powerful voice in the N.H.S. If the profession can make allies of these new bodies then the consequences for the N.H.S. might be surprisingly constructive. But should the councils overplay their inspectorial role then the outcome would be less happy.

¹ *National Health Service: The Administrative Structure of the Medical and Related Services in England and Wales*. London, H.M.S.O., 1968.

² *National Health Service Reorganization: Consultative Document*. London, D.H.S.S., 1971.

³ *British Medical Journal Supplement*, 1971, 3, 101.

Analgesic Nephropathy or Phenacetin Poisoning

The argument still continues over the relative importance of various analgesic drugs in the production of progressive renal damage, more than 20 years after the first descriptions of this association by Spuhler and Zollinger.¹ The clinical, radiological, and pathological features of analgesic nephropathy are now relatively clearly defined.^{2,3} Recurrent attacks occur of fever, dysuria, and the passage of large numbers of leucocytes in the urine, often with fragments of renal papilla; the episodes closely resemble acute urinary infection, and they lead eventually to impaired renal function. Papillary necrosis and severe interstitial fibrosis in both renal cortex and medulla are the major pathological changes.⁴

The frequency of recognition of excessive and prolonged analgesic intake depends entirely on a high index of suspicion; persistence in direct questioning of both patients and their relatives may be necessary, as all the drugs used are common household remedies, freely available, and their use is often denied. The incidence estimated at 450 cases each year by Koutsaimanis and de Wardener,³ or 10% of all cases of renal failure,⁵ may be considerably less than the real figure, since many patients with a similar clinical course and with no satisfactory explanation for their renal failure present to nephrologists, and the histological changes of non-specific interstitial fibrosis are not uncommon on renal biopsy in chronic renal disease.

So there is little argument as to the existence of the condition though epidemiological studies of the effects of analgesic consumption have led to conflicting information. In South Wales⁶ and the U.S.A.⁷ a total of 517 women who took more than 1 g per day of analgesic drugs were reported to have no greater incidence of reduced renal function than a total of 9,192 controls who did not admit to taking these substances. Tests on 623 Swiss factory workers who took phenacetin showed that they had twice the incidence of proteinuria and five times that of reduced concentrating ability than was found in others taking alternative analgesics or no drugs.⁸ Phenacetin has been regarded as the major factor in the many analgesic mixtures reported to have caused the condition, but the relatively huge amounts of several kilograms required and the prolonged period over which tablets or powders have to be consumed has led some research teams to incriminate aspirin⁹ or impurities in the phenacetin¹⁰ rather than phenacetin itself. Aspirin does produce papillary necrosis in rats, especially after

dehydration, in smaller dosage and more readily than does phenacetin;¹¹ it also appears to reduce glomerular filtration rate¹² and to increase tubular cell excretion in man.¹³

The consumption of aspirin in the community is enormous. Two studies reported in this issue (pp. 593 and 597) by a team of New Zealand physicians and by Dr. A. F. Macklon and his colleagues describe tests of renal function on patients treated with large doses of aspirin for long periods. The results do not appear to differ from accepted normal values, and support earlier work by Sørensen;¹⁴ patients given up to 5 kg of aspirin show no evidence of any convincing association between progressive renal impairment and aspirin dosage. The two recent studies both conclude that the evidence against aspirin is extremely weak and that no convincing reason exists to restrict the sales on the basis of nephrotoxicity. The Newcastle finding of unchanging renal function two years after further consumption of aspirin conflicts with the reports¹⁵ from Australia of relapses in patients with analgesic nephropathy who consumed aspirin mixtures without phenacetin.

Direct evidence in this area of disagreement is almost impossible to obtain. The encouraging reduction in the incidence of analgesic nephropathy reported after restriction of phenacetin in Scandinavia¹⁶ and Scotland,¹⁷ and the very recent decision by the Department of Health and Social Security to restrict the sale of phenacetin mixtures to pharmacists from June 1974 and to put it on prescription alone from January 1975 may settle the dispute, since closer control and reduction of phenacetin intake should eventually result in the disappearance of the condition if it is really due to chronic phenacetin poisoning. There will still be a need, however, to warn patients with unexplained renal damage of the potential hazards of analgesic drugs in large prolonged dosage and also to encourage greater awareness of the association of these drugs with urinary symptoms by their medical advisers.

¹ Spuhler, O., and Zollinger, H. U., *Zeitschrift für Klinische Medizin*, 1953, 151, 1.

² *British Medical Journal*, 1970, 4, 125.

³ Koutsaimanis, K. G., and de Wardener, H. D., *British Medical Journal*, 1970, 4, 131.

⁴ Burry, A. F., *Nephron*, 1968, 5, 185.

⁵ Cove Smith, J. R., and Knapp, M. S., *Lancet*, 1973, 2, 70.

⁶ Waters, W. E., Elwood, P. C., and Assher, A. W., *Lancet*, 1973, 1, 341.

⁷ Lawson, D. H., *Journal of Chronic Diseases*, 1973, 26, 39.

⁸ Dubach, U. C., Levy, P. S., and Mueller, A., *American Journal of Epidemiology*, 1971, 93, 425.

⁹ Kincaid-Smith, P., Nanra, R. S., and Fairley, K. F., in *Renal Infection and Renal Scarring*, ed. P. Kincaid-Smith and K. F. Fairley. Melbourne, Mercedes, 1970.

¹⁰ Calder, I. C., Funder, C. C., Green, C. R., Ham, K. N., and Tange, J. D., *British Medical Journal*, 1971, 4, 518.

¹¹ Nanra, R. S., and Kincaid-Smith, P., *British Medical Journal*, 1970, 3, 559.

¹² Beeley, L., and Kendall, M., *British Medical Journal*, 1971, 1, 707.

¹³ Prescott, L. S., Sansur, M., Levin, W., and Conney, A. H., *Clinical Pharmacology and Therapeutics*, 1968, 9, 605.

¹⁴ Sørensen, A. W. S., *Nephron*, 1966, 3, 366.

¹⁵ Kincaid-Smith, P., *British Medical Journal*, 1970, 4, 618.

¹⁶ Nordenfelt, O., *Acta Medica Scandinavica*, 1972, 191, 11.

Assessment of Kidney Transplantation

The eleventh report from the Renal Transplant Registry¹ is based on 12,389 renal transplants performed from 1951 to the end of 1972. Of these 11,264 were first transplants, 1,019 second operations, and 106 third and subsequent transplants. There were 10,357 patients whose follow-up was regarded as adequate, and of these 4,934 (47.6%) were alive with func-

tioning kidneys; 1,880 (18.2%) were alive with non-functioning transplants and were being maintained by dialysis; and 3,543 (34.2%) had died. Those alive with functioning transplants had survived on average 899 days since the operation. Sixty-two patients were reported to have undergone successful pregnancies, but there are probably considerably more such cases which were not reported. The proportion of transplants from living donors has changed over the years but is currently reported as about 37% in the U.S.A., 21% in Europe, and less than 2% in Australia.

This brief statistical summary gives a very incomplete picture but is enough to show that renal transplantation is an established therapeutic procedure and that rejection of a transplant does not preclude further treatment by dialysis. These two procedures are liable to fail for quite different reasons and they should be regarded as complementary. There will be a few patients for whom only one possibility is open, but for the great majority the important thing is to ensure that the two are combined in the best possible way. The ability to achieve this balance must be the first consideration in deciding whether and where and when new transplantation centres should be developed.

The second matter to be considered in deciding transplant priorities is the possibility of obtaining suitable cadaver kidneys in adequate numbers. This is partly a national problem, and it is disappointing that the Health Departments appear to have been so dilatory in tackling it. It seems absurd, for example, that the legal interpretation of the Tissue Grafting Act still remains arguable,² so that there is no general agreement on what is meant by "the person in charge of the body," or whether a surgeon is obliged to seek the consent of some (or all?) of the relatives when, before his death, the deceased has signified in writing that he wishes his organs to be made available for use as transplants. There is, however, also a local problem, and the extent to which neurosurgeons and others responsible for the care of dying patients are prepared to co-operate with transplant teams varies from one hospital to another.

There is still considerable variation in results even between different centres in the same country, and this certainly depends partly on experience. It is of interest that in 1971 (the most recent year with full one-year follow-up information) the results in the U.S.A. from centres which performed more than 25 transplant operations in the year were better than those from centres which performed fewer than this. One must, however, also consider the criteria in respect of age and general fitness which are applied in determining whether or not a patient is to be accepted for transplantation. Some centres in Britain³ have reported results far better than the national average, but their criteria are extremely strict. Others which, *faut de mieux*, are reluctant to refuse people already rejected for long-term dialysis inevitably have a much higher transplant failure rate and mortality, especially during the first month or two after operation.

When one is comparing results from different countries with cadaver transplants another very important factor to be considered is the quality of the organs. The propriety of removing organs before the heart stops on the basis of a diagnosis of cerebral death is an ethical question which needs to be considered not only by the medical profession but by the community as a whole. It is, on the other hand, a matter of fact that where this is the custom the results are distinctly better.

One rather disappointing conclusion which emerges from successive reports of the registry is that during the last five

years or so, despite a vast amount of research on tissue typing and attempts to develop new immunosuppressive agents such as antilymphocytic globulin, there has been no dramatic change in the results—indeed probably no change which cannot be accounted for by the use of better transplants and fitter recipients or by increasing experience of the teams concerned. But this is surely not so much a cause of reproach as a spur to fresh endeavour.

¹ Advisory Committee of the Renal Transplant Registry, *Journal of the American Medical Association*, 1973, 226, 1197.

² *British Medical Journal*, 1973, 3, 360.

³ Bell, P. R. F., *et al.*, *British Medical Journal*, 1972, 4, 408.

Whatever Happened to Brodrick?

For the latter part of the six years' gestation period of the report of the Committee on Death Certification and Coroners,¹ the somewhat theatrical phrase "Waiting for Brodrick" was current in medicolegal circles. When in November 1971 the postmature and overweight report was finally delivered, these mutterings were replaced by feverish discussion on the part of many organizations concerned with medicolegal matters and some months of expectant hopefulness ensued. Now, two-and-a-quarter years later, another theatrical phrase seems justified: "Whatever happened to Brodrick?"

The painstaking report, running to no fewer than 418 pages, presumably rests in peace in some Whitehall pigeon-hole, with a thinner coating of the same dust settling upon it as laid more heavily on the similar Wright Report² of 1936. A little of the latter report was incorporated into the coroners' rules but so far nothing recommended in Brodrick has been even started.

The Brodrick Committee was set up primarily in response to the unease created by the B.M.A. publication *Deaths in the Community*,³ aided by J. D. J. Havard's book *The Detection of Secret Homicide*.⁴ Though the report discounts these factors which were instrumental in creating it, a great deal of basic fact-finding and diligent research appears in the document, as well as a commendable number of commonsense recommendations which would improve the reliability of death certification and eliminate many unnecessary inquests. Almost all the B.M.A. proposals were accepted, with a few important differences of opinion remaining, notably on the provision of pathological services. No measure of agreement is, however, of the slightest use unless Government action follows, and so far there has been no sign of any Government intention to put even the non-controversial recommendations into effect.

The Brodrick Report dealt with a number of widely separate matters, from the organization of the coroner system, through death certification and disposal of the dead, to the forensic pathology service. Some of these require more urgent action than others and some recommendations can be put into effect more easily than others. At present the higher echelons of government have other things to think about than the Brodrick Report, but this is not really relevant. Most of the points made by Brodrick could be implemented without a new Act of Parliament. Statutory instruments and regulations made under the existing acts could deal with matters such as certification and reorganization of pathological and coroner services. The medical profession need hardly flatter itself that matters such as this need the personal attention of