With either treatment oral potassium supplements should be given daily. After intravenous therapy, when the patient is improving, prednisone will need to be given by mouth, the dose being reduced slowly.

Because of the delay in the appearance of the maximal effect of parenteral corticosteroids it is prudent for the doctor to give 200 mg of hydrocortisone intravenously to the patient who is being sent to hospital from an outlying district. Corticotrophin is not usually recommended for the treatment of acute asthma in patients on regular treatment with corticosteroids because the adrenal response in terms of cortisol output is likely to be inadequate. But patients with severe asthma who were not dependent on steroids have done well when given tetracosactrin depot (1 mg intramuscularly on admission followed by repeated injections of the same dose at 24-hour intervals for three to five days). Though the plasma cortisol levels rose significantly on this regimen they did not reach 100 μg/dl.[17] Again, oral potassium supplements must be given.

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Transplant sensationalism

Anyone who wonders why British transplant surgeons have difficulty in getting cadaver organs need look no further than the front page of the *News of the World* for 28 September.[1] A banner headline "The Body Snatchers" introduced an article suggesting that the Department of Health's recent circular[2] on the interpretation of the Human Tissue Act 1961 "opened the way for no-consent transplants." In fact, the circular did no more than confirm the advice given by our legal correspondent[3] as long ago as 1973: that when patients die in hospital the "person lawfully in possession of the body" is the hospital authority, and that in those circumstances the kidneys may be removed without the relatives' specific consent provided that reasonable inquiries have failed to show any evidence of objection by the patient or his family.

Sadly, the Medical Defence Union persists[4] in taking an opposite view and in advising its members that they may risk civil action if they follow the Government's guidance. Yet the circumstances in which the legal uncertainty is relevant are relatively few; for there would be no shortage of kidneys if full use was made of the opportunities presented by patients dying in intensive care and neurosurgical units. Almost always in such cases the relatives are available for consultation; but only too often the clinicians concerned prefer to ignore the possibility and make no approach for consent.

Part of this reluctance is, no doubt, due to pressure of work and a natural unwillingness to intrude into the relatives' grief, but a second important factor is the antagonism to transplantation still to be found in some members of the public and whipped up by newspaper sensationalism.

The disappointing response by the public to the Department of Health's donor card scheme may well be attributable—at least in part—to the antagonism shown by some sections of the press to transplantation. Anti transplant propaganda—like other vociferous protest campaigns—commonly combines emotion and ignorance and often misrepresents the facts.

[1] *News of the World*, 28 September 1975.
[2] *Health Service Circular*, HSC (1S) 156.
[3] *British Medical Journal*, 1973, **3**, 360.
[4] *Daily Mail*, 29 September 1975.

Painful redistribution

There are two major issues about the allocation of resources to the National Health Service. The first is what proportion of the nation's income should go to the NHS. The second is how best to share out the available resources within the Service. Uncertainty about the former gives added urgency to the latter: the less money there is around the more important it is to ensure that it will be distributed in an equitable way. Given our present economic plight, it is therefore not surprising that the Department of Health should have set up a working party in May this year to look into the distribution of resources within the NHS and that the working party in turn has put on an unusual turn of speed to produce its first interim report.[1] If its recommendations are accepted and implemented the report's effects will be both unprecedented and considerable: there will be a cut in the total revenue funds allocated to some of the regional health authorities in the next financial year.

The NHS inherited unequal distribution of resources among the different regions of the country, seemingly unrelated to available indicators of need.[2] The persistence of these inequalities persuaded the DHSS in 1970 to introduce a new formula for allocating revenue funds to the regions. This was designed to iron out some of the more glaring discrepancies over 10 years by allowing the budgets of the worst-off regions to increase at a faster rate than those of the best-off ones. Nevertheless, the success of this approach—which was in any case criticised for its leisurely timetable—depended crucially on the overall growth in the resources of the NHS as a whole: the scope for bringing about equity by a differential growth rate obviously diminishes if the growth rate itself falls (or if there is no growth).

This, then, is the problem to which the working party—composed predominantly of NHS administrators and DHSS officials—addressed itself. The 1970 formula was based on three rough and ready indicators of need: population structure, occupied beds, and case load. This clearly favoured the status quo: by including bed numbers as indicators of present need (as distinct from past policies) it loaded the

dice in favour of the better-endowed regions. The working party therefore proposes a new formula which eliminates the bed factor. Its view is that "we see no justification, particularly in a situation of extreme resource constraint, for continuing to covenant part of the costs of overbedding." More weight is given to the population structure, and the case load element in the formula is retained as an incentive to the regions to increase throughput. So under the new formula the distribution of resources would favour not those parts of the country with most beds—Mersey and the Metropolitan regions—but the most underprovided.

What makes this proposal really painful is the present overall shortage of resources. As the working party points out, this means that redistribution in favour of the most needy regions can be achieved only by imposing cuts on the least needy regions. The report recommends that only part of the redistribution should be carried out in 1976-7. It suggests that no region should have either a rise or a fall of over 2·5% in its revenue allocation (though the report also gives figures showing the implications of setting the "ceiling" and the "floor" at different levels). Furthermore, it proposes that the revenue consequences of past major capital works should continue to be directly financed by the DHSS. Putting forward what will no doubt turn out to be a controversial formula for providing for the higher costs of teaching hospitals, the working party proposes a teaching and research allowance of £10 800 a year per student in the metropolitan regions and £5 500 elsewhere (all at September 1974 prices). Even with these various safeguards and cushions, however, the report's recommendations would have a severe impact.

Assuming an overall 1·5% increase in NHS revenue resources in 1976-7—a lower rate of increase than in recent years or than projected in the Government's Expenditure White Paper published earlier this year[3]—the report calculates that five regions would have their allocations cut. These are the four Metropolitan regions (with the South-west Thames suffering the biggest cut of 1·55%) and Mersey. At the opposite extreme, Trent and East Anglia would have increments of 6·83% and 4·43%, respectively. These are above the 2·5% "ceiling" because they include allowance also for the revenue consequence of capital spending. If this is indeed going to be the pattern of allocations next year—and, as the report points out, various other permutations are possible on different assumptions—then some difficult policy questions are going to arise in the five regions which face cuts. Firstly, these regions are not homogeneous: some of their area health authorities are well above the national average in terms of beds and expenditure per head of population, but others fall below it.[4] Will any regional cuts be applied across the board to all the AHAs? Or will there be selective cuts, concentrated on the best-off AHAs? If so, those in inner London and Liverpool face a much more serious crisis than the overall regional percentage cuts would imply. Again, geographical selectivity apart, will the regional authorities cut all services impartially? Or will certain sectors—the community services and those for particularly vulnerable sections of the population are obvious candidates—be given priority treatment? If so, the rest of the services will have to be cut back more ruthlessly to create scope for selective growth within the context of a falling regional budget.

The working party recognises that its proposals will demand "a rationalisation programme involving substantial closures of uneconomic units, reductions in excess beds, changes of use, etc." Furthermore, it argues that "rationalisation of the order envisaged will be illusory unless Ministers are prepared take a resolute stand when politically sensitive cases or those which are otherwise contested—for example, by community health councils—are presented for decision." This is indisputable, but the emphasis is perhaps wrong. It is not just a "resolute stand"—namely, a willingness to face unpopularity—that is required from the politicians. It is acceptance of responsibility, in the first place, for the circumstances that compel those working in the NHS to provide a service which is more limited in scope and lower in quality than they think is right. If the service is going to be restricted then doctors must insist that those who do not pay the piper take full responsibility for the ensuing discords.

[1] *First Interim Report of the Resources Allocation Working Party: Allocation to Regions in 1976-7*, Department of Health and Social Security, 1975.
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Viral Haemorrhagic Fevers

The reappearance of human Marburg virus infection in Johannesburg earlier this year[1] has renewed interest in haemorrhagic fevers of viral origin. Marburg virus was first isolated in 1967 after simultaneous outbreaks in two German laboratories and in Yugoslavia.[2] The 25 primary infections in man were all associated with handling material from African green monkeys recently imported from Uganda.

All the patients were severely ill with generalised symptoms, an erythematous rash, purpura, haematemesis and melaena, a tendency to bleed from needle-puncture wounds, and signs of renal and hepatic failure. Seven patients died as a result of bleeding and liver failure. There were five secondary cases in hospital staff and relatives. Monkeys are believed not to be the natural reservoir of infection, and the normal host of the virus has yet to be elucidated.

Smallpox and yellow fever are most commonly associated with haemorrhagic symptoms. The incidence of smallpox is rapidly waning owing to the extensive efforts of the World Health Organisation's eradication programme. Yellow fever, however, is still extremely active in Africa and South America.[3] Within the last 15 years there have been extensive epidemics in Ethiopia, West Africa, and most recently in Angola. The Ethiopian epidemic[4] included untold numbers of cases and between 15 000 and 30 000 deaths between 1960 and 1962. Black vomit of altered blood was a common feature. *Aedes simpsoni* was the mosquito host of the virus. In Senegal and Angola *Aedes aegypti* was responsible for urban epidemics. Recent outbreaks in South America have all been small and sporadic, occurring in rural areas near forests, where the virus persists in wild monkeys.[3] Recent studies have shown that an epizootic is active close to Panama and is again poised to cross the canal.

Several other arboviruses produce haemorrhagic fevers. Among the tick-borne viruses are Kyasanur Forest disease[5] and Omsk haemorrhagic fever. Both have caused severe, prostrating illnesses with gastrointestinal and haemorrhagic complications, often with a fatal outcome. The former condition is confined to India, is transmitted by *Haemaphysalis* ticks, and maintained in small mammals, with monkeys often acting as amplifying hosts. The related Omsk haemorrhagic fever virus is confined to a relatively small area in the USSR. Another tick-borne group contains the Congo viruses, of