Magnetic resonance imaging of cervical spine. Arrow shows cerebellar tonsils extending to upper border of lamina of second cervical vertebra. There is no evidence of syrinx formation

Comment

Arnold-Chiari malformations are currently described to be of four different types.¹ The type I Arnold-Chiari malformation is characterised by caudal descent of the cerebellar tonsils and may or may not be associated with a syrinx; a degree of medullary descent and buckling of lower medulla may be present. The type II malformation is more extensive and usually associated with meningocele; a syrinx in the

medulla or spinal cord may or may not be present. Type III is uncommon and involves caudal displacement of the cerebellum and brain stem into a high cervical or occipital meningocele. Type IV consists of only cerebellar hypoplasia.

The type I malformation presents in adult life with a wide range of features, including raised intracranial pressure, headache, a progressive cerebellar syndrome, syringomyelia, and various signs of involvement of the lower cranial nerves and medulla, including dysphagia.^{4,5} In one series of 50 cases three patients complained of dysphagia⁴ and in another dysphagia was a subsidiary complaint in one of 40 patients.⁵ There is one report⁶ (and another in correspondence⁷) of dysphagia as the sole manifestation of adult type I malformation. In our patient laryngeal penetration was largely "silent" and only the secondary effect of aspiration pneumonia was noted by the patient. The case emphasises that a neurological cause for recurrent aspiration should always be considered, even in the absence of prominent signs.

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Leading for Health: responses

Which model for delivering care?

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This is the fifth in a series of articles responding to the questions raised by the BMA's document, "Leading for Health." The document looks well beyond the coming British election and raises questions about health and health care that will be on the agenda of many countries into the next century.

If someone was asked to design the perfect health care system they might come up with the following ingredients. It would be free at time of need to the whole population. It would have as its foundation a high class system of primary care with a gatekeeper role into the secondary care sector. The secondary care sector would be pyramidal in shape with its base consisting of district general hospitals serving populations of 300 000-500 000. These hospitals would deal with the conditions that such populations would throw up in sufficient volume on a regular basis; they would be backed up by regional centres covering larger populations and dealing with patients with less common conditions, referred by the district general hospitals, so that fewer centres would be needed to attract the number of cases needed to run a cost effective service. The whole system would be centrally planned, using, in particular, access to capital and medical manpower as controls to make sure the strategy of the centre was adhered to and ensure that unplanned developments or expansion did not take place.

Changes in the system

The United Kingdom in theory had such a system—the result of a combined effort of two unlikely allies, Nye Bevan and Enoch Powell. Bevan in 1948 set out the principles of free access and universal coverage. Powell, as minister for health in the early '60s, introduced

rational planning of health services and the concept of district general hospitals and regional centres.

Why was such a system changed? Indeed, has it changed as far as the public are concerned? Are the arguments that are polarising health care workers more about the way they wish to work rather than the way the system actually works? For undoubtedly the biggest debate at the present time is about how health care should be delivered. The politicians, including medicopoliticians, may well leap on the more obvious changes, such as NHS trusts and general practitioner fundholders, to make a point, but the fundamental debate concerns the separation of the purchasing and providing roles in health care and the different models of running both of these functions.

*Leading for Health: a BMA Agenda for Health*¹ does not attempt to answer these questions. Rather, in its section on models of delivering care, after capturing the main variations in four models—one of planned provision and three concerning the purchaser-provider split—it raises the following key questions: "Is it advantageous to separate the purchaser and provider function? Or could the old planned health care system be improved to a point where it worked better than such a system? What are the relative merits of the two systems? If a purchaser-provider system is preferred which [of the three] model[s] would work best? How can community care best be fitted into such a system?"

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Any attempt to answer these questions must look at what went wrong with the old system and whether it is capable of responding to treatment. In particular, is the only treatment necessary more money?

The running of the NHS

No comprehensive scientific study has been carried out into the overall running of the NHS, at least not one that examined both financing and delivery. Many studies have looked at particular aspects of the NHS. Several key points emerge from these:

- The system did not start from scratch. As a result the distribution of hospitals (and their funding) did not always align with the current population distribution
- Regional referral centres were based on hospitals linked with medical schools. Again they did not necessarily fit easily into the NHS structure. London, for example, though serving only four regions, had 12 medical schools, which produced 30% of the country's medical graduates
- The medical manpower system was not perfect. Putting aside the problems of running a pyramidal training structure, this structure did not (and probably could not) tackle the question whether doctors who had a large part of their training in regional referral centres could practise what they had learnt when appointed to district general hospitals. This form of training is perfectly understandable but it might not be either the best use of resources or best in terms of outcome. Training for cancer treatment and for neonatal care are the obvious examples
- Control on capital was not absolute. Fundraising and, more recently, joint ventures with the private sector meant that the introduction of new technology slipped out of the hands of the Department of Health and the regional health authorities
- Capital as a whole was insufficient, in particular to cope with the movement of populations and the development of mental illness and handicap services
- The system was increasingly complex and of necessity bureaucratic. Standard terms and conditions of service for staff, be they in Inverness or London, did not fit well with the complexities of the employment market in the United Kingdom in the '80s. Monitoring the efficiency of the various parts of the services from the centre became impossible. The 1600 "performance indicators" lay largely ignored in the computer disks dispatched from the Department of Health.

Nye Bevan's principles of free access and universal coverage for the health service still stand as ideals

Clouding issues

Above all revenue was almost certainly insufficient, but proper debate was obscured by three key factors. Firstly, because patients never had to be billed the true costs of individual patient care were not known. This allowed politicians to duck the issue by pointing out "they must be inefficient, they don't know what things cost" and to compare different hospital costs without taking into account case mix, again assuming that there were still large amounts of cash to be released.

Secondly, the politicians were assisted in their arguments by being able to point to population based data on health status such as perinatal mortality rates and standardised mortality ratios to suggest that in terms of outcome the health service stood up relatively well to international comparisons. They were allowed to confuse improving the health of the population with providing a service whose prime function, as seen by that population, was to treat them when they were ill.

Thirdly, and probably the key to the whole dilemma faced by the NHS, is that the rationing of health care that has been increasingly carried out over the past three years had been carried out previously, if not in secret then in private. Certainly waiting lists were public knowledge, but what was not known was that many people did not even get on to waiting lists. This became particularly relevant as new but expensive technologies came on the scene, starting with renal replacement therapy, when those who were not judged to be "best bets" for a treatment programme were not told "sorry we can't afford it," but "here are some tablets," and they would quietly go home and die. The problem gathered pace in the '70s and '80s with such treatments as angioplasty and joint replacement.

Looking to the future

In summary, what has to be addressed in either revitalising the old system or setting up the new system is how to:

- Recognise the differences and the interrelationships of improving the health of a population as opposed to providing a service to treat people when they are ill
- Provide equal access to the primary and secondary care services while balancing the costs of relocating hospitals and staff with expecting patients to travel
- Relate costs to activity and outcome so that politicians, health care professionals, and, above all, the public can make valid comparisons of efficiency and effectiveness
- Allow changes in service provisions, especially new developments and the introduction of new treatments, to be controlled by those funding the health service—namely, the public or its representatives
- Ensure that when decisions are taken to ration health care that they are taken in such a way that they are open and that the public is aware of them
- Manage such a system with minimal bureaucracy.

Planned provision v purchaser-provider split

Both a system based on planned provision and one based on a purchaser-provider split could deliver these objectives. The question is which is most likely to? In the end it will probably boil down to a view of human behaviour and belief in what is achievable in a system which as long as it represents a very significant proportion of central government expenditure will always be controlled and indeed manipulated by politicians for their own ends.

The problem is it is not possible to experiment. You have to have one system or another. You cannot have some hospitals funded centrally and in effect free goods while others depend on the market, or some parts of the country funded on the basis of their population and

the rest on the basis of history, albeit with a planned move towards funding based on the population.

You could look elsewhere. Again this will be unhelpful. All health care systems, be they market based, centrally planned, or a combination, have both successes and failures that proponents and opponents can point to. They are all without exception failing to meet either the public's expectations or governments' wishes to contain cost.

I favour separating the purchasing and providing roles. They are both big roles. Identifying health care needs and allocating resources to meet them require different skills from those required for running hospitals and community services. In particular, if it is accepted that choices will have to be made because demand will always exceed supply then the task will become doubly difficult. Whatever organisation makes these choices will need to take the public with it, so they should therefore be made at as local a level as possible. The centre can also have an input. Together they can plan just as effectively as before if not more effectively. By removing responsibility for providing services the purchasers not only can concentrate solely on purchasing decisions but also will not be bound by loyalty or history and can make decisions objectively. The London regions, for example, might well not have required Professor Tomlinson to advise on their future if those responsible for looking after the residents were not also those responsible for the hospitals.

Similarly, if providers have to concentrate only on providing a service there will be no inbuilt incentive to withhold from the patient what treatment is suitable. There will be no possibility of collusion with managers to slow the system down or ration care without telling the patient. Obviously the money may not be there to meet the need, but the providers' role in advising the patient will be much clearer. There is obviously the risk that excessive, unnecessary, or unproved treatment will be given, but that would assume that the purchasers were weak and this may any way be less harmful than the undertreatment that goes on at present.

Again the question of whether planned provision or a purchaser-provider split is the best model for health care cannot be answered scientifically, but exposing the rationing that goes on can only be for the good of the public if not for the good of the politician and it will be orchestrated only by a purchaser-provider split.

Planning v market forces

The next question is whether movement across the purchaser-provider divide should be governed by market forces or planned. If purchasing authorities are strong then they will use the evidence of costs and quality emerging from the provider units to plan their services. The debate centres on whether they will have those skills of analysis and whether or not energy should go into bringing all hospitals up to standard rather than rewarding those doing well. Again it comes down to personal beliefs, especially in human nature. My view is that all the evidence to date of the use of centrally derived performance indicators to improve performance is that they do not work and that the quickest way to expose and change variations in health costs and outcome is to expose them to the public and their advocates, be they district health authorities or general practitioners, and reward those who do well.

Fundholding GPs v district health authorities

This leads on to the last question: who controls the purchasing agenda, district health authorities acting as agents for the population as a whole or general practitioner fundholders? The answer has to be both.

Fundholding allows the individual general prac-

titioner to act as a powerful advocate for his or her individual patient. Purchasing authorities—and all models suggest merging district health authorities and family health services authorities—need to look at the population as a whole, and their larger budgets are needed to cope with the risk of rare but expensive procedures. There is no reason why the benefits of both systems cannot be combined by fundholding being organised at district health authority level for all practices, with local agreements on what is purchased direct by general practitioners and what is part of block contracts. The main feature is to ensure that as much leverage is put on the provider system as possible, both in long term planning and in management of individual patients. The district health authority if properly run has the leverage for long term planning and the general practitioner fundholder for management. It should be relatively easy to get the best of both worlds.

Community care

Providing and purchasing of community care should be the same as for acute care. Indeed, general practitioners would be in a much stronger position to determine what they wish to provide in the primary care field than a separate community provider. Where the major problem will be, as indeed it always has been, is in the division of responsibilities both for home support and for long stay care between the health service and local authorities. It is a morass at the moment, not only in terms of financial responsibility but also in deciding who should look after whom. Equally dependent or indeed independent patients may be found in NHS long stay wards, local authority part III homes, or private nursing homes. Acute wards have many patients who are waiting for home helps or meals on wheels.

Local authority commissioning

The last model put forward in the BMA's document is that proposed by the Institute for Public Policy Research and would make local authorities the purchasers of health care. Bevan opposed this originally because his experience of local authority health care was bad. Nevertheless, it should be examined not least in terms of whether European views or regions gain force here. A regionalised United Kingdom may well give the opportunity to merge health authority and local authority responsibility for purchasing services. The advantages seem obvious, but so do the disadvantages: health would be a local as well as a political football and the learning curve would be large. Again, whether this is the correct way forward can probably never be determined objectively.

Conclusions

A theoretical intellectually strong case could well be made that the present system is the correct one and that it will work if sufficient money is flung at it. However, there is no hard evidence, to back this up. The only hard evidence is that to date no government has flung sufficient money at it and there is no evidence to suggest that this will change in the future. An American politician once said "All health systems have problems—they always will, there will never be enough money—all you can do is tinker with them so that the public think you are doing something." That is dishonest. The purchaser-provider split almost certainly will be the system which will make it most difficult to deceive the public as to the imbalance between funding and provision, and for that alone it should be supported.

1 BMA. *Leading for health: a BMA agenda for health*. London: BMA, 1991.