

Bristol & Weston Health Authority

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MEMORANDUM ON THE DESIGNATION OF BRISTOL AS A SUPRA REGIONAL CENTRE IN NEONATAL AND INFANT CARDIOLOGY AND CARDIAC SURGERY - JULY, 1982

A Working Party of the BMA Joint Consultants Committee submitted a report to the DHSS last year on the designation of supra regional centres in neonatal and infant cardiology and cardiac surgery. This report is currently being considered by the Regional Medical Officers.

The number of open heart operations in infants was taken as the major criterion for designation of a unit as a supra regional centre.

General paediatric cardiology services.

We believe it is unrealistic to base any such decision simply on current surgical volume in infants, without taking cognisance of other important factors such as geographical position and communications, association with a University Department of Child Health, historical evolution and ties with paediatricians in the region and adjacent areas of other regions, anticipated expansion and development, and standards of associated paediatric and neonatal services. Furthermore, the actual surgical operation is only a part of the overall management of the infant with heart disease.

The arguments put forward to the District, Area and Regional Health Authorities (October, 1981) favouring Bristol as a supra regional centre included the following:

1. The paediatric cardiology service already functions as the de facto Regional and Supra regional Centre (although not yet officially recognised as such), drawing 28% of new referrals to the unit from Avon, 48% from the rest of the SW Region and 24% from South Wales, North Wessex and elsewhere.
2. Few centres dealing with heart disease in children can boast of two experienced and expert paediatric cardiologists, in addition to two experienced cardiac surgeons, one of whom has been specially trained in the surgery of congenital heart disease (though the latter are unable to expand this work under present circumstances).
3. The long-term management of patients is supervised near their homes through a system of Consultant Cardiac Clinics developed over many years and probably more comprehensive than in any other paediatric cardiology service in England. Regular peripheral clinics are held in Bath, Swindon, Cheltenham, Gloucester, Taunton, Barnstaple, Exeter, Torquay, Plymouth and Truro, and patients are referred by paediatricians in South Wales. Close liaison exists with paediatricians in all these centres, who would resist any curtailment in the services they and their patients receive.

4. Bristol has a most favourable geographic position with major rail connections and excellent road services via the M4 and M5 motorways. No other major centre in Southern England (outside London) is as well placed.
5. Optimal management of children with heart disease is possible only in a paediatric environment, as emphasised in "Cardiac Services for Children in England and Wales. Report of a Working Party of the British Paediatric Association and the British Paediatric Cardiology section. February, 1979" and "Second Report of a Joint Cardiology Committee of the Royal College of Physicians of London and the Royal College of Surgeons of England on combined cardiac centres for investigation and treatment. British Heart Journal 43: 211-219, 1980". The Bristol Royal Hospital for Sick Children is ideally suited to provide direct access to the expertise of paediatric physicians, anaesthetists, neonatologists, surgeons, radiologists and pathologists, and of appropriately trained nursing staff, physiotherapists, biotechnicians, dieticians, occupational therapists, teachers, etc.

Practical developments in the extension of cardiac facilities for children in Bristol which have a bearing on this issue include the following:

1. A new Intensive Care Unit dealing mainly with infant cardiac patients has been funded by the Guild of Friends of the Children's Hospital and building will be completed in November, 1982.
2. A plan to develop cardiac catheterisation facilities within the Bristol Children's Hospital has been supported fully by the Division of Children's Services, as well as the District and Regional Health Authorities, and a detailed study is under way.

Neonates and Infants.

Since the concept of supra regional cardiac centre applies specifically to neonates and infants, it should be noted that of the 200 cardiac catheterisations performed in children each year in Bristol the proportion under one year of age has increased from 34% in 1979, to 41% in 1980, and 49% in 1981. The number of neonates (under one month of age) referred for cardiac assessment is also increasing; 55 were catheterised during 1981 alone, of whom 32 were under one week. The presence of a strong neonatal service, well equipped and with outstanding medical and nursing expertise, is therefore of inestimable value and forms an important component in the comprehensive management of these critically ill babies.

There are two main reasons for the relatively small number of infants subjected to open heart surgery at present. One is our conservative approach to operating on small babies when similar results can be achieved at a slightly older age. For instance, the last 25 patients with transposition of the great arteries were all corrected between 13 and 28 months rather than between 9 and 12 months as in some other units. Nevertheless it should be noted that 55% of the 51 closed heart operations performed in 1981 were in babies under one year, most requiring urgent palliative or closed corrective procedures. The more important factor, however, is the lack of facilities for cardiac surgery generally. A proposal to double the overall cardiac surgical output has been accepted in principle by the Regional Health Authority, and discussions between the Regional and District Health Authorities about detailed plans are taking place. This important step will permit an increase in paediatric cardiac surgery at all ages.

The fate of the severely ill neonate and infant with heart disease was highlighted at the meeting of the Regional Paediatric Advisory Committee in June,

1982. Firstly, there was uniform support from throughout the region for a supra regional paediatric cardiac centre to be based in Bristol. Secondly, it was emphasised that seriously ill babies referred with suspected heart disease often had other pathology as well, or developed non-cardiac problems, and required broadly based paediatric expertise. (It is noteworthy that Bristol already functions as the regional referral centre for other specialties such as paediatric oncology, neonatal surgery and neonatology). Thirdly, the favourable system of communications allowing rapid road transportation of desperately ill babies to Bristol, and direct access by rail for families without cars, was once again stressed. (The enclosed maps demonstrate Bristol's focal position at the junction of the M4 and M5 motorways and of the inter-city rail routes, especially in relation to the South West).

We believe, therefore, that Bristol has an irrefutable claim for recognition as a supra regional cardiac centre for neonates and infants. Since the ever-increasing commitment demanded by cardiac patients in this age group is already evident in this unit, and since the majority have complex lesions and will require ongoing detailed observation in future years, redirection of these patients to a centre elsewhere must result in the demise of meaningful paediatric cardiology in Bristol.

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