



SAFE PAEDIATRIC NEUROSURGERY 2001

A Report from the

SOCIETY OF BRITISH NEUROLOGICAL SURGEONS

SAFE PAEDIATRIC NEUROSURGERY 2001

INTRODUCTION

In 1997 the SBNS agreed to the setting up of a task force to set out the minimum requirements of safe paediatric neurosurgery in the United Kingdom. This document was published in 1998 as "Safe Paediatric Neurosurgery". In response to the recommendations of the Public Enquiry into Children's Heart surgery at Bristol Royal Infirmary 1984 to 1995 (The Kennedy Report) and the report of the Paediatric Forum of the Royal College of Surgeons of England "Children's Surgery – a First Class Service" the Council of the SBNS convened an "ad hoc" working group to review the recommendations contained within Safe Paediatric Neurosurgery. Although many of the recommendations in the Kennedy Report are applicable to the NHS as a whole there are some specific recommendations in the document with regard to the care of children. These are:

- Children and their healthcare needs must be given higher priority in the NHS.
- The healthcare needs of children are different from those of adults and this must be recognised.
- Specialist care must be concentrated in a limited number of centres where the staff have the necessary skill and experience.
- All healthcare staff who treat children must have training in caring for children.

The SBNS is committed to the development of paediatric neurosurgery as an area of subspecialty expertise within neurosurgery. The British Paediatric Neurosurgery Group was founded in 1988 to promote and encourage that development. It has achieved recognition from the Society and in return any reports and recommendations from the group must be submitted to the Council for approval before they can be acted upon.

The objectives set down in the original "Safe Paediatric Neurosurgery" were to ensure that children's care would be of the highest quality and would be delivered by recognised Paediatric Neurosurgeons supported by the appropriate staff and facilities, so that children requiring paediatric neurosurgery would obtain the same degree of care and level of expertise currently available for the practice of adult neurosurgery. The ad hoc working group recognised that not all the recommendations in the original document have yet been enacted. The objective of this document remains the continued development and maintenance of the highest quality of paediatric neurosurgical care by paediatric neurosurgeons established within an environment of paediatric child centred care.

Specialist paediatric neurosurgical practice involves a close working relationship with other paediatric specialists (paediatricians, paediatric neurologists, anaesthetists with paediatric expertise and specially trained paediatric nurses). Nevertheless, it is important to recognise that substantial differences exist between paediatric practice in cardiac surgery and in neurosurgery. Whereas in cardiac surgery the technical procedures for the vast majority of children do not lie in the province of the adult cardiac surgeon, in neurosurgery the operative techniques needed to deal with head injury, haemorrhage, hydrocephalus and some brain tumours do not differ radically between children and adults. In those circumstances the expertise provided by adult neurosurgeons may also provide an appropriate degree of care and level of skill. However, the physiology and pathology in the children's age group are in some respects different, and certain paediatric neurosurgical conditions are rare and do not normally occur in adults. For these types of conditions it is generally accepted that they would be best managed by neurosurgeons with the appropriate paediatric specialist training and expertise.

PAEDIATRIC NEUROSURGICAL EMERGENCIES

Some 10% of the neurosurgical workload encompass the paediatric age group and paediatric neurosurgical emergencies are common. The working group considered that, in common with adults, children with neurosurgical emergencies requiring urgent neurosurgical intervention should have access to appropriate neurosurgical help within 2 hours. Children being transported for urgent neurosurgical intervention should have appropriate nursing support and airway protection during the process of transport. Specialist paediatric retrieval teams are available in some areas but if the "activation" of such a retrieval team were to result in a delay in access by the child to specialist neurosurgical expertise then alternative safe means of transport should be used. The local paediatric team should be closely involved with the paediatric care of all children requiring emergency neurosurgical treatment.

All neurosurgical units providing care for neurosurgical emergencies should have clinicians with the necessary experience and training to undertake the immediate care of neurosurgical emergencies occurring in children. If separate facilities for children are not available then children should not be housed in adult facilities for longer than is required for their safe neurosurgical management and the child should be transferred to appropriate paediatric facilities as soon as is practicable. Units undertaking the emergency care of children with neurosurgical problems must have access to CT and MR scanning.

SPECIALIST PAEDIATRIC NEUROSURGICAL FACILITIES

Neurosurgical units providing specialist paediatric neurosurgical services should have sufficient facilities and resources to allow immediate transfer, urgent same day admission or admission within 48 hours as necessary. Specialist paediatric services must have appropriate support facilities including access to Paediatric Intensive and High Dependency Care. Such facilities should be supported by

specialist Neuroradiologists, Neuropathologists and Anaesthetists with the necessary expertise. Access to CT and MRI imaging is essential. Paediatric neurologists should also be available. The Consultant medical team must be supported by properly trained and qualified nurses including theatre staff and professionals in allied disciplines. The specialist paediatric neurosurgical unit should have a paediatric environment able to support the social requirements of children and family, eg play area, schooling and family accommodation. The facilities should comply with the Paediatric Charter.

In units offering specialist paediatric neurosurgical services a member of the paediatric neurosurgical team should be available to provide telephone advice to referring hospitals and neurosurgical units who may be undertaking the emergency care of paediatric neurosurgical conditions. The configuration and deployment of neurosurgical input to a specialist paediatric neurosurgical unit will depend on workload and intensity but the group considered that single-handed specialist paediatric neurosurgical practice was inappropriate and that a minimum of two Neurosurgeons specialising in paediatric neurosurgery per specialist unit is required.

Neurosurgeons providing specialist paediatric neurosurgical expertise should have a regular defined commitment to paediatric neurosurgery, including the necessary theatre and outpatient clinic time within their weekly timetable. They should be prepared to demonstrate appropriate Continuing Medical Education in their subspecialty at appraisal.

TRAINING

As Neurosurgeons who are not necessarily specialists in paediatric neurosurgery may nevertheless from time to time be called upon to provide emergency services for children with urgent neurosurgical conditions, the neurosurgical training programme will give every trainee neurosurgeon exposure to paediatric neurosurgery and specific training in the management of paediatric neurosurgical emergencies sufficient to enable them to manage an emergency when on call. Those intending to subspecialise in paediatric neurosurgery should complete a full year of specialty training in a major unit which has the necessary volume of paediatric case material to provide appropriate experience. The Intercollegiate Board Examinations will continue to include paediatric neurosurgery in their syllabus and content.

SUBSPECIALISATION

In certain neurosurgical units which provide paediatric services some further subspecialty expertise may develop. The development of such ultra-specialised paediatric neurosurgical expertise will normally require a further period of specialist training and experience. The development of specialised services for the syndromic craniofacial anomalies is an example. With respect to the syndromic craniofacial anomalies, these should be referred to the nationally designated centres. Non-syndromic craniosynostosis may be managed in non-designated centres. Other complex conditions, such as the surgery of childhood epilepsy, complex spinal dysraphism and functional surgery would be likely to benefit from development from subspecialisation within paediatric neurosurgery services. Similarly, the management of children with childhood brain and spinal tumours is best accomplished by those with a subspecialty interest and expertise using a multi-disciplinary approach. Accordingly neurosurgical units which undertake the management of paediatric brain and spinal tumours must have access to paediatric oncologists who are members of or affiliated to the UK Children's Cancer Study Group. Cross referral from other neurosurgical units to those ultra-specialised services should be encouraged. Neurosurgical units undertaking such work will need to develop managed clinical networks to ensure appropriate continuity of care in their referring hospitals and the community. Clinicians working in subspecialty fields and who have received the necessary training to treat patients with conditions which currently are included in the NSCAG commissioning arrangements (eg the Syndromic Craniofacial Synostosis) must ensure that if they intend to offer such subspecialty expertise they should be able to demonstrate that all the members of the team proposing to undertake such work have had the necessary training and expertise and that the unit is likely to command sufficient volumes of work to maintain that expertise. They should also be able to demonstrate that they have the necessary facilities, infrastructure support and audit arrangements before seeking appropriate funding support.

AUDIT

Neurosurgical units which undertake paediatric work should be responsible for the development and dissemination of agreed guidelines for patient management and for their regular up-dating. In common with the requirements of good clinical governance all specialist paediatric neurosurgical units should conduct regular audits of their activity and contribute where appropriate to national audits, such as the UK Shunt Register, United Kingdom Childhood Cancer Study Group.

The personnel in those units providing emergency services for children but in which there is no specific paediatric specialist expertise should also regularly audit their results and ensure that they maintain the necessary skills and expertise to undertake this emergency work.

REFERENCES

1. "Safe Neurosurgery" (SBNS 1993)
2. "Guidance for Services for Children and Young People with Brain and Spinal Tumours" (UKCCSG and SBNS 1997)
3. "Safe Paediatric Neurosurgery" (SBNS 1998)
4. "Children's Surgery – A First Class Service" (Paediatric Forum of the Royal College of Surgeons of England 2000)
5. "Safe Neurosurgery 2000" (SBNS 2000)

MEMBERSHIP OF "AD HOC" WORKING GROUP

Mr Paul Chumas
Mr David Hardy
Mr Anthony Hockley
Miss Dorothy Lang
Mr James Leggate
Mr Paul May
Mr James Steers

SOCIETY OF BRITISH NEUROLOGICAL SURGEONS
35-43 Lincoln's Inn Fields, London WC2A 3PN
Tel: 020 7869 6892 Fax: 020 7869 6890
E-mail: admin@sbns.freemove.co.uk