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CORRESPONDENCE

Correspondents are asked to be brief

Selecting Cases of Myelomeningocele for Surgery

SIR,—Dr. John Lorber[1] has given a detailed account of the results of the early surgical treatment of 524 unselected cases of myelomeningocele in Sheffield over the years 1959-63 and 1967. In all cases treatment was started on the first day of life. The overall results in the most severely affected children have been very disappointing. The infants who fared particularly badly were those with extensive paralysis at birth, those with a head circumference exceeding the 90th percentile by 2 cm or more, and those born with a gross kyphosis or with major associated congenital defects. No doubt after much heart-searching, Dr. Lorber has come to the firm conclusion that selection for treatment can be made on a humanitarian basis—in other words, that surgery should be reserved for selected cases.

This series can have few, if any, rivals in the world at present. Every doctor and every nurse who is likely to look after such infants should at least read Dr. Lorber's article carefully—written, as it has been, with courage and honesty. It provides yet another landmark in paediatric thought.

The story of the management of infants with spina bifida in this country has fallen into three main phases.

Phase 1.—In the pre-sulphonamide and pre-antibiotic era the vast majority of infants who were born with open myelomingocele developed ascending menigeal infection and succumbed within a few weeks or months of birth. Surgery was carried out only on suitable cases without gross neurological deficit. Provided there had only been one affected child in the family, there remained a reasonable chance that a subsequent sibling would be normal.

Phase 2.—With the advent of sulphonamides and antibiotics their use was extended to these unfortunate infants both locally and systemically. Inevitably in some instances infection was prevented, the surface of the lesion became epithelized, and life was prolonged, although the problem of hydrocephalus remained largely unsolved. The appalling results of this phase led many clinicians to acclaim later advances.

Phase 3.—The introduction of an adequate valve system for cerebrospinal fluid drainage led to a reasonable degree of prevention of hydrocephalus. It was suggested that very early closure of the myelomeningocele was essential. There followed an enthusiastic and unselective surgical approach involving closure of the myelomeningocele within hours of birth, followed later by the insertion of a suitable valve to prevent hydrocephalus. Meningitis was prevented or was treated with an increasingly effective range of antibiotics. The majority of paediatric surgeons in this country have devotedly and selflessly lent their skill—both by day and by night—to this policy. Medical students have been taught that all cases of open myelomeningocele should be subjected to surgery without delay, and nurses have been taught likewise. Owing to pressure of opinion it has been increasingly difficult to withhold surgery, even in the most severely affected infants.

Throughout these recent years there has been a number of paediatricians who have viewed this totally unselective surgical policy with acute disquiet and an awareness of the ever-mounting burden of long-term human suffering. These paediatricians now find in the Sheffield figures authentic support for their view and they look forward to a reappraisal on the part of all those concerned with the care of these children and their families.

However, if there is to be an honest shift of opinion, it is important that university teachers and the authors of the standard paediatric text books published in Britain should indicate that some severe cases of myelomeningocele may not be suitable candidates for surgery. It is essential that paediatric surgeons and neurosurgeons should be able to support paediatricians in coming to a joint decision in individual cases as to the wisdom of carrying out surgery. Finally, when cases are deemed unsuitable for surgery, reversion to the wholly unsatisfactory situation found during phase 2 must be avoided.—I am, etc.,

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1 Lorber, J., *Developmental Medicine and Child Neurology*, 1971, 13, 279.

Meningomyelocele: The Price of Treatment

SIR,—Mr. C. D. R. Lightowler's contribution (15 May, p. 385) to Contemporary Themes in which he discusses the price of treatment of myelomeningocele has reached me, and strikes one or two discordant notes. The figures in the first few paragraphs are an unsatisfactory mixture of an attempt to steer a passage between the personal and published numbers from Sheffield, and it seems that the arithmetic of the figures from Birmingham results in the deduction that as many special school places are needed per 1,000 annual births as the actual incidence of the condition among the newborn (for example, 132 in 65,935 births), which is remarkable since the number of the 132 surviving at five years is given as 27, of which almost half were alive and well and only the remainder disabled.

Assuming that the Registrar General's figures are a bit low because of the voluntary notification, and that two per 1,000 live births is a reasonable average, then Mr. Lightowler's figures for incidence need to be increased, and the probable number of survivors, if full comprehensive care is given from birth, also will be somewhat above 500. However, these survivors will bring with them relatively more of the infants with a greater neurological deficit than an untreated series will have. The general round figures from a number of sources[1] put about 50% of the survivors as total paraplegics and 25%