

### Death without concealment

SIR,—The views expressed in your anonymous leading article (19-26 December, p 1629) do not go unchallenged. My career in paediatric surgery started just before 1970, so I have been closely involved in some of the developments which have occurred in the care of the newborn during the last decade. During that time, like the suspecting public to whom you refer, I have sensed a change in attitude of some paediatricians and their surgeons.

There is no doubt that this is best demonstrated by your own example of infants born with myelomeningocele. Indeed, one is no longer surprised when one's junior colleagues express their reluctance or revulsion at having any part to play in the treatment of these unfortunate children. I do not object to emergency surgery being withheld from those infants who have extensive open lesions which will cause severe paralysis, deformity, and incontinence. In fact, there is little evidence that emergency repair is of much benefit to such infants since if left without surgery many of these lesions will epithelialise within a few weeks. However, there is a subtle difference between selecting an infant for management other than by emergency operation and selecting an infant to die.

When Lorber's patients were selected for non-active treatment, they were not treated with antibiotics and they were not tube fed, chloral hydrate was prescribed to treat irritability or discomfort, and the parents were dissuaded from taking the infants home.<sup>1</sup> All of the untreated infants died, and more than 90% were dead within six months. In the series from Liverpool 30% of the infants who did not undergo neonatal surgery were still alive at the end of their first year, although several had had shunts inserted to control hydrocephalus.<sup>2</sup> Most of the infants referred to me have been suitable for emergency closure, so I assume that "selection" occurred elsewhere. However, for various reasons, several infants have been unsuitable for surgery. In my unit these infants are fed normally, are not given antibiotics or sedatives, and are allowed home as soon as the parents feel able to cope. All have survived. Although all have some degree of handicap, rejection by the parents has not occurred. Hence it would seem that survival rates in various centres depend as much on the views and opinions of the doctors as on the nature of the lesions.

Therefore one is forced to consider that what you deny may in fact be true—that attitudes have changed during the last decade and that now some doctors may be ready to consider depriving neonates of their lives rather than allowing them to survive with handicaps. Certainly, it seems common practice to keep imperfect infants in hospital, rather than allowing them home, and to prescribe frequent doses of phenobarbitone, chloral hydrate, or dihydrocodeine tartrate (DF 118) to relieve discomfort until death occurs.

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<sup>1</sup> Lorber J, Salfield SA. *Arch Dis Child* 1981;56:822-30.

<sup>2</sup> Robards MF, Thomas GG, Rosenbloom L. *Br Med J* 1975;iv:12-3.

SIR,—There could hardly be a clearer example of the shift in the ethical basis of antenatal

and neonatal medicine than your leading article (19-26 December, p 1629), where a more efficient programme of antenatal diagnosis and abortion is welcomed as a better solution to the management of the handicapped neonate.

The ground for the debate has indeed changed. Fifteen years ago the abortion of a handicapped fetus was itself an ethical issue. Now you accept abortion as the solution to the management of the handicapped infant, and the propriety of the solution is assumed.

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### Patent ductus arteriosus in premature babies

SIR,—The note of restraint in Dr Malcolm Chiswick's excellent leading article (5 December, p 1490) may go some way towards curbing the current wave of enthusiasm for ligating the ductus in tiny babies on intensive care. I wonder if I am alone in never having subjected a baby under my care to this operation or knowingly had one in whom ductal ligation might have been life saving. On the other hand, I have had a number who would almost certainly have been operated on elsewhere but who made excellent recoveries with conventional medical management alone.

Many premature infants, as Dr Chiswick rightly emphasises, have loud uncomplicated murmurs for which no special treatment is required. Those with shunts large enough to embarrass the circulation usually respond to fluid restriction, frusemide, and patience. Cardiac failure is not an inevitable sequel to an audible murmur, provided that meticulous attention is paid to the fluid intake, nursing temperature, haemoglobin, pH, and arterial oxygen, all of which are factors which influence the size of the shunt and consequently the development of heart failure. Dangerously high fluid intakes are far too common, especially in babies fed slavishly on ever-increasing volumes of breast milk in vain attempts to make them grow; since this is low in protein, sodium, and calories, the intake is desperately stepped up to 220 or even 240 ml/kg a day whereas a purpose-made milk such as Prematalac (Cow and Gate) supplies all needs at a modest 180 ml/kg per day—and a low-solute formula may be substituted temporarily if necessary. There is also a tendency to be satisfied with arterial oxygen tensions of 10.7 kPa (50-60 mm Hg) but if the aim is a level of 6.7-8 kPa (80 mm Hg) enough ductal constriction may occur to reduce the load on the heart. I also believe in keeping the haemoglobin level above 14 g/dl until the baby is well and progressing normally. I am

not satisfied that these criteria have always been scrupulously observed in babies subjected to surgery.

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### Pseudomembranous colitis in a 5-week-old infant

SIR,—We read with considerable interest the report by Dr S A Richardson and others (5 December, p 1510) of a case of pseudomembranous colitis associated with *Clostridium difficile* in an infant. *C difficile* colitis is generally regarded as rare in childhood and certainly there has been a paucity of such reports from Britain.

During the previous 24 months, however, of the 26 cases of *C difficile* colitis seen in our unit, seven were in children, whose ages ranged from 5 weeks to 10 years (see table). In all cases neutralisable *C difficile* toxin was detected and culture yielded the organisms. Although most cases were mild, one child had a life-threatening illness (case 1). She presented with severe diarrhoea soon after completing a five-day course of amoxycillin, prescribed for her bilateral otitis media. The abdomen was greatly distended with absent bowel sounds and a plain x-ray film of the abdomen demonstrated toxic megacolon. Sigmoidoscopy revealed typical changes of pseudomembranous colitis. Fortunately, with nasogastric suction, intravenous fluid replacement, and intravenous metronidazole plus oral vancomycin the child steadily improved and made a complete recovery.

While it is true that *C difficile* can be found in up to 50% of healthy neonates,<sup>1</sup> appearance of toxin in symptomless children is rare, though this has been reported.<sup>2</sup> All the patients in the present series had colitis, as shown by the sigmoidoscopic appearance or by the presence of inflammatory exudate in faeces; and we feel that *C difficile* was causally related to the antibiotic-associated diarrhoea in these children.

It is noteworthy that amoxycillin was the antibiotic involved in three of our seven cases as well as in the fatal case reported by Dr Richardson and his colleagues. In a review of antibiotic-associated pseudomembranous colitis in children Viscidi and Bartlett<sup>3</sup> found ampicillin or amoxycillin implicated in 16 of the 35 cases. These drugs are used very widely in paediatric practice—often for clinical conditions in which either antibiotics are not indicated or perhaps a better choice would be erythromycin, a drug incriminated only rarely in antibiotic-associated colitis.

Our experience suggests that *C difficile* colitis in childhood is not as rare as currently

#### Clinical and laboratory observations in seven children with *C difficile* colitis

Case No	Age	Sex	Drugs taken previously	Indication	Evidence for colitis	Treatment
1	15 months	F	Amoxycillin	Otitis media	Pseudomembranous colitis on sigmoidoscopy	Intravenous metronidazole, oral vancomycin
2	10 years	F	Clindamycin	Sinusitis	Pseudomembranous colitis on sigmoidoscopy	Oral metronidazole
3	6 weeks	M	Chloramphenicol, flucloxacillin, fucidin	Staphylococcal septicaemia	Pus and blood in stools	Oral metronidazole
4	5 weeks	F	Streptomycin	Diarrhoea	Pus and blood in stools	Oral vancomycin
5	9 months	M	Penicillin	Rash and fever	Pus and blood in stools	None
6	5 months	M	Amoxycillin	Fever	Colitis on sigmoidoscopy	Oral vancomycin
7	7 weeks	M	Amoxycillin	Cough	Pus and blood in stools	Oral vancomycin

believed and a high index of suspicion is necessary in view of the devastating nature of the disease in its established state.

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<sup>1</sup> Larson HE, Price AB, Honour P, Borriello SP. *Lancet* 1978;ii:1063-6.

<sup>2</sup> Rietra PJGM, Slaterus KW, Zanen HC, Meuwissen SGM. *Lancet* 1978;ii:319.

<sup>3</sup> Viscidi RP, Bartlett JG. *Pediatrics* 1981;67:381-6.

### Histopathology reporting in large-bowel cancer

SIR,—Dr B C Morson's leading article "Histopathology reporting in large-bowel cancer" (5 December, p 1493) points out the opportunity for the Royal College of Pathologists to initiate medical audits over a range of histopathological reporting. Your readers may be interested to hear that your colleagues in the College of American Pathologists have been experimenting in this area since 1969.

The thrust of the American effort has been directed at assessment of the art of diagnostic histological judgment in breast and prostate lesions. Ongoing programmes for these two organs are offered by the college. Studies in cytopathological judgment have been completed for effusion material and are in progress for cervicovaginal smears. Logistical problems prevent the offering of these programmes to European, Australian, and other pathologists. It is possible, however, to make the models and even the College of American Pathologists' computer centre available to interested societies in other countries. Work is carried on by the Histopathology and Cytopathology Committee, which is chaired by Dr Donald W Penner.

Dr Morson's concern over specimens which are accompanied by less-than-ideal clinical data, and which receive less-than-ideal macroscopic evaluation, are shared in the United States. The College of American Pathologists' Cancer Committee under Dr Robert V P Hutter is attacking part of the problem by attempting to write minimal standards for gross and microscopic assessment of cancers in a variety of organs.

We follow with great interest your success with audit programmes such as the large-bowel cancer project and the National Laboratory Quality Control Scheme.

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### An evaluation of flexible fiberoptic sigmoidoscopy

SIR,—I was interested to read the article by Mr K D Vellacott and Mr J D Hardcastle (12 December, p 1583) but cannot accept their suggestion that "a flexible sigmoidoscopic examination alone may be adequate" and their conclusion that "it will lead to a decrease in the number of barium enemas required."

Surgeon Lieutenant-Commander R J Leicester and Surgeon Commander R H Hunt (12 December, p 1607) have recently pointed out that flexible sigmoidoscopy does

not change the indications for barium enema, for normal findings from flexible sigmoidoscopy do not guarantee a normal proximal colon. If, however, a diagnosis is made with flexible sigmoidoscopy a barium enema or total colonoscopy is still indicated to identify or exclude other more proximal lesions. Up to 37% of neoplastic colonic lesions occur proximal to the splenic flexure and are therefore out of each of the flexible sigmoidoscope.<sup>1</sup> The incidence of synchronous polyps and carcinoma<sup>2</sup> is high enough to make a complete examination of the entire colon mandatory in every case, even when a lesion is found by flexible or rigid sigmoidoscopy.

Although flexible sigmoidoscopy is a valuable investigation, it is an inadequate examination of the colon in patients with colonic symptoms and it will not result in a decrease in the number of barium enemas.

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<sup>1</sup> Hunt RH, Wayne JD. *Colonoscopy: techniques, clinical practice and colour atlas*. London: Chapman and Hall, 1981:276.

<sup>2</sup> Heald RJ, Lockhart-Mummery HE. *Br J Surg* 1973;59:16-9.

### Oesophageal perforation of fiberoptic gastroscopy

SIR,—Dr D G Colin-Jones and Mr B Sterry Ashby (12 December, p 1608) state that I base my views on experience with the rigid oesophagoscope, now virtually obsolete. Certainly I have now retired from active surgery, but I did not do so before obtaining some experience of the flexible fiberoptic endoscope and its advantages and limitations. This paragraph of their letter, which seeks to diminish my competence to comment, does nothing to enhance their case.

Ten months ago (14 February, p 569) I intervened in a discussion of the relative priorities of radiology and endoscopy in the diagnosis of upper gastrointestinal disease. Then, and ever since, I have been trying to make the point that, however rare perforation may be, the consequences are usually so disastrous (and from a diagnostic not a therapeutic procedure), and contrast so enormously with the triviality of the barium meal or swallow which could or would have prevented them, that the medicolegal results would be most severe. I had thought this self-evident, but worthy of mention, and I have been surprised at the vigour of the reaction, and the protests about the safety of flexible fiberoptic endoscopy. But it is not, and never can be, absolutely safe. Some statistics have been produced from endoscopy clinics which confirm this (29 August, p 583) and I have already commented on them (10 October, p 987). I will recall only that 31 of 101 units reported "serious complications." Only 24 of the 31 gave details and, of the 173 units circularised, only 101 replied at all. Dr Colin-Jones and Mr Sperry Ashby now tell us that prior radiology is not an essential, and in the same paragraph that 12% of 172 units insisted on it. They do not tell us how many other units consider it desirable, or advisable, or how many use it as a routine. How many patients had preliminary radiology, and what was the morbidity and mortality? How many had blind endoscopy, and what was their morbidity and mortality? We have never been told, and until we are told it would be wise

to take all precautions possible against swinging penalties.

New scientific discoveries are always—and rightly—seized and developed for medical purposes. New instruments are devised, developed, improved, and standardised. The new instruments are rarely if ever as effective as their enthusiasts expected and after a period of optimistic over-use settle down to their proper place. Such is the history of fiberoptic endoscopy, and if it is now in a phase of retrenchment it would be a mistake to try to maintain it at an unreal level by denying its limitations.

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\*.\*This correspondence is now closed.—ED, *BMJ*.

### Last scene of all

SIR,—I was interested in the comments (12 December, p 1559) from Professor P H Millard on the Royal College of Physicians Report "Organic Mental Impairment in the Elderly." Let me state clearly that I support the view that this is an excellent report and should be "essential reading." I would go further and praise it as a first-class example of brevity and clarity.

Professor Millard states, however, that patients with dementia require "full clinical evaluation, haematological and biochemical investigations, and computed tomography." I would like to dispute strongly the inclusion of this last as a required investigation in demented aged patients. The RCP report is suitably guarded in this context and went no further than to state that "there is a need for the careful assessment of the value of screening techniques, especially those used in the routine investigation of potentially treatable causes of dementia, owing to the low prevalence of the conditions" and "that their practical value in clinical work is less certain and, again, there is a clear need for careful evaluation before they can be put forward as screening tests." This I would not construe as advocacy for routine computed tomography in aged demented patients.

Professor Millard refers to the paper from Sydney<sup>1</sup> but omits to point out that the yield of "potentially reversible causes" was lower (3.8%) in demented patients aged 64 and over than in patients aged 45-64 (11.5%). It is highly probable that the yield of potentially treatable causes would be a good deal lower in the demented patients associated with our increasing numbers of aged (that is, those aged 75 and over or 85 and over).

The Sydney report came from a neuropsychiatric institute and presumably the demented patients referred there were subject to selection processes and therefore likely to contain a higher proportion of potentially remediable conditions. It is certain that they do not represent a true picture of the demented patients which are occurring in increasing numbers as a result of the rapid expansion in numbers of aged and very aged persons. The Sydney workers do not specify the ages of their patients except to say that 53 out of 200 were aged "65+." I suspect that few were over 75 and would be most surprised if any were more than 85.

Like the RCP report, I would recommend that we should not suggest that a computed tomography scan should be used as a part of