

among the 119 recorded as dying in 1990 or how many would not have taken an overdose had they been aware that paracetamol, if taken in large quantities, often results in a painful and lingering death due to liver failure.

By diverting attention towards the 1143 deaths due to overdose of drugs other than paracetamol Spooner disregards the fact that paracetamol is consistently one of the most common drugs used in suicide and far exceeds any other over the counter medication as a method of death by poisoning. It is also by far the most common substance used in deliberate self poisoning attempts. In a review of 3263 admissions after deliberate self poisoning in South West Thames region in 1989 I found that 957 were a result of paracetamol overdose (unpublished study). The next most common class of drugs used was benzodiazepines, which accounted for 584 admissions. Benzodiazepines, of course, are prescription only drugs, and an overdose is far less likely to cause death.

Combining paracetamol with methionine, as Bray suggests, may not be the answer, but surely the manufacturers of paracetamol should take a more responsible attitude by at least placing a more specific warning of the effects of overdose on the packaging.

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- 2 Bray GP. Liver failure induced by paracetamol. *BMJ* 1993;306:157-8. (16 January.)

EDITOR,—Gary P Bray makes several suggestions to reduce the number of deaths from paracetamol overdose.¹ We wish to add a French one. As in Britain, paracetamol is one of the most commonly used analgesics in France. As a consequence the incidence of paracetamol poisoning is high, but liver failure is uncommon and fatal cases are rare (<10 a year). The explanation is simple. People who overdose in a suicidal attempt may take one or several drugs but generally ingest at most one pack of each. Accordingly, the content of each pack of paracetamol was legally limited to 8 g at the beginning of the 1980s.² This measure was obviously effective.

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Organ donation after paracetamol overdose

EDITOR,—Gary P Bray reports that each year 160 people in England and Wales die of liver failure after an overdose of paracetamol.¹ We suggest that they should be regarded as potential heart and cornea donors.

A 33 year old man was admitted to another hospital after taking 30 tablets of paracetamol with alcohol some 17 hours previously. He received acetylcysteine, but his condition deteriorated, showing signs of liver failure, and he was transferred to this hospital for supportive treatment. Over the next 24 hours he developed grade 3 encephalopathy, and high flux dialysis was started. He showed no signs of improvement over the next 48 hours. He was transferred to the intensive care

unit for intubation for airway control after a period of desaturation. Twenty four hours later he showed signs of brain stem compression, having fixed dilated pupils, no spontaneous respiratory effort, and hypertension.

The patient's relatives were keen for him to be an organ donor. For a diagnosis of brain stem death irremediable structural brain damage should be present.² It was not possible to confirm brain stem death in this patient because of potentially reversible metabolic disturbances. An alternative method of diagnosing brain stem death needed to be found. After discussions with the transplant coordinator, coroner, and radiologist it was decided to perform arch arteriography. This procedure, which is relatively easy to perform, is used as a confirmatory test of brain stem death in other countries. The arteriogram showed no evidence of intracranial perfusion, the internal carotids terminating below the skull base. Brain stem death was therefore confirmed. The patient's heart was removed for transplantation, and the recipient is making excellent progress.

A shortage of organ donors continues to be the main limiting factor in most types of transplantation.³ One third of patients accepted for heart transplantation die before a suitable donor is found.⁴ It has been suggested that supply would be adequate if all potential donors became actual donors.⁵ Mortality in patients with fulminant hepatic failure is over 40%.⁶ Deaths from paracetamol overdose are unnecessary, and efforts should be made to decrease this mortality. If people dying of paracetamol overdose were regarded as potential organ donors this would increase the number of hearts and corneas available for transplantation. It might also help the relatives to see something positive come from these unnecessary deaths.

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Outcome of breech delivery at term

EDITOR,—J G Thorpe-Beeston and colleagues reported a rate of intrapartum and neonatal death for normally formed singleton infants presenting by the breech at term of 0.8% for vaginal delivery and 0.03% for caesarean section.¹ We agree with correspondents that analysis should be by intention to treat,^{2,4} and we report on term breech presentations in Aberdeen Maternity Hospital 1981-90. We have presented our data in the same way as MacKenzie and Jefferies from Oxford.⁴

Of the 1111 women for whom vaginal delivery

Outcome for normally formed singleton infants presenting by the breech in Aberdeen Maternity Hospital 1981-1990, and figures for Aberdeen Maternity Hospital and John Radcliffe Hospital, Oxford, combined

	Vaginal delivery	Emergency caesarean section	All planned vaginal delivery	Elective caesarean section	All breech presentations
<i>Aberdeen Maternity Hospital</i>					
No of babies	644	467	1111	625	1736
No of perinatal deaths	2	1	3	0	3
Perinatal deaths/1000	3.1	2.1	2.7	0.0	1.7
<i>John Radcliffe Hospital and Aberdeen Maternity Hospital</i>					
No of babies	1449	903	2352	1330	3682
No of perinatal deaths	6	1	7	3	10
Perinatal deaths/1000	4.1	1.1	2.9	2.3	2.7

was planned, 467 (42%) had an emergency caesarean section. (This rate is similar to that in Oxford but lower than that in London.) Only three perinatal deaths occurred in normally formed babies, and these were all in the group for which vaginal delivery was planned (table). As the numbers were so small the table also gives our results amalgamated with those obtained in Oxford⁴: in these two large teaching hospitals the perinatal death rate in cases in which vaginal delivery is planned (2.9/1000) is no different from that in elective caesarean section is carried out (2.3/1000) or in all cases (2.7/1000).

Because of the large numbers of emergency caesarean sections it may be true, as Paul Bingham and Richard Lilford claim, that a policy of routine elective caesarean section would not increase immediate maternal mortality,³ but surely this cannot be seriously advocated for a negligible benefit for the fetus. We estimate that since we in Grampian deliver about 1% of British babies there would have to be about 6500 extra caesarean sections in Britain each year if current practice is similar to ours and was replaced by routine elective caesarean section. From the point of view of women, satisfaction with the birth, postoperative morbidity, and the implications of caesarean section for the mode of delivery in future pregnancies are also important.

Another factor that needs to be considered when policy is formulated is that lethal malformation will not always be diagnosed before delivery. In our series three cases of hydrocephaly were diagnosed before delivery, but another five lethal malformations were not (trisomy 18, Vater syndrome, hypoplastic left heart syndrome, Saldini-Noonan syndrome, and sirenómelia). Only one of the infants with these malformations was delivered by elective caesarean section (the one with Vater syndrome); three of the four others were not recognised as presenting by the breech until labour was established, which limited the scope for prenatal diagnosis.

We believe that most women may still be advised that vaginal delivery can be safely accomplished when a term fetus presents by the breech and that there is no case for routine elective caesarean section.

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Obstetric outcome should be analysed by parity

EDITOR,—Anne Fleissig emphasises the need to collect data on the prevalence of procedures in childbirth.¹ We recommend, however, that all