undoubtedly follow as systems fostering continuing medical education evolve and are optimised.

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1 Flynn FV. Continuing medical education (CME) for career post holders in pathology. Bulletin of the Royal College of Pathologists 1993;82:18-9.

Perinatal and infant postmortem examination

Quality of examinations must improve

EDITOR,—When one of my twin sons was stillborn in London in 1992 one of the main factors in my acceptance of the painful necessity of a postmortem examination was the knowledge that it would be carried out by a dedicated neonatal pathologist. I was confident that the quality of the examination would be such that any ascertainable cause of his unexpected and inexplicable death would be discovered.

Patrick H T Cartlidge and colleagues report that the main reason for the low rate of perinatal postmortem examinations is parental refusal, followed by failure of clinicians to request an examination.1 In their study almost half of the examinations failed to reach the minimum acceptable score and "information giving parents and clinicians a better understanding of the cause of death" was obtained in only 18% of cases. I would suggest that many bereaved parents would be even more likely to refuse consent if they knew these results. Furthermore, some clinicians might be less likely to request a necropsy or attempt to persuade ambivalent parents to give consent.

A higher rate of perinatal postmortem examinations is necessary for all the reasons given by Cartlidge and colleagues. But surely the first step in achieving this is to take active measures to improve the quality of the examinations through training and audit. Yet this issue is barely addressed by either Cartlidge and colleagues or Malcolm Chiswick in his editorial.2 Instead their solutions focus on exhorting clinicians to have a more positive attitude. Such an attitude will come about when clinicians and parents are persuaded that no stone will be left unturned in the search for the cause of death. In the meantime, simply hoping that the guidelines of the Royal College of Pathologists will improve matters is not good enough.3

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1 Cartlidge PHT, Dawson AT, Stewart JH, Vujanic GM. Value and quality of perinatal and infant postmortem examination cohort analysis of 400 consecutive deaths. BM7 1995;310: 155-8. (21 January.)

2 Chiswick M. Perinatal and infant postmortem examination. *BMJ*

1995;310:141-2. (21 January.)
3 Royal College of Pathologists. Guidelines for post mortem reports.

London: RCP, 1993.

Postmortem examinations are the final audit

EDITOR,—The appreciable contribution that postmortem examination makes to the final diagnosis should not be overlooked.1 I recall a patient diagnosed as having had bronchial carcinoma for two years who was treated with radiotherapy for recurrent haemoptysis; there was no tissue diagnosis of carcinoma despite multiple fibreoptic bronchoscopies. When he died of a massive haemoptysis in 1991 I requested a postmortem examination. This reported an aspiration pneumonia caused by inhalation of a chicken bone with no evidence of neoplasia.

The suggestion that few postmortem studies are done because it is difficult to ask relatives' permission at the time of bereavement is a poor excuse. In my experience, a simple and clear explanation of why an examination is being sought has nearly always resulted in permission being granted. Moreover, relatives want to know the results of the examination.

Postmortem examinations may challenge our self complacency in diagnosis and inspire improvement in future clinical management. We should actively seek postmortem examinations as they are the final audit and we can improve only when we are aware of our deficits.

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1 Cartlidge PHT, Dawson AT, Stewart JH, Vujanic GM. Value and quality of perinatal and infant postmortem examinations: t analysis of 400 consecutive deaths. BMJ 1995;310: 155-8. (21 January.)

Non-invasive investigations are also helpful if permission for a necropsy is refused

EDITOR,—Patrick H T Cartlidge and colleagues1 and Malcolm Chiswick² suggest that clinicians should be driving the process for increasing rates of necropsy. In this unit, however, if permission for a necropsy is refused, we arrange for detailed magnetic resonance imaging and plain radiography and ultrasonography to try to establish whether any important abnormalities have been missed, particularly in congenital malformations. This permits detailed investigation of the fetus or infant while still respecting the wishes of the parents.

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- 1 Cartlidge PHT, Dawson AT, Stewart JH, Vujanic GM. Value and quality of perinatal and infant postmortem examinations: cohort analysis of 400 consecutive deaths. BM7 1995;310: 155-8. (21 January.)
- 2 Chiswick M. Perinatal and infant postmortem examination. BMJ 1995;310:141-2. (21 January.)

Postmortem reports provide valuable information

EDITOR,—Malcolm Chiswick's editorial and Patrick H T Cartlidge and colleagues' paper² raise the profile of postmortem examinations of fetuses, neonates, and infants. The term perinatal postmortem examination may imply that postmortem examination of younger fetuses is less important. The contrary is the case—for example, many terminations of pregnancy for abnormalities detected by ultrasonography occur before 20 weeks, as do some intrauterine deaths, in which postmortem examination is central to establishing the diagnosis.

With increasing expectations of parental bonding, grieving, and sensitive disposal of fetal remains, it is impractical that the body should be examined by a clinical geneticist whenever dysmorphism is suspected. Regional genetics services are stretched as it is, and transferring the body to the regional centre may be difficult or costly. Parents may expect the examination to be done locally. Good quality photographs, x ray films, and a postmortem report including histopathological findings and other appropriate results are invaluable to the geneticist.

The issue of the rate of postmortem examinations has been oversimplified. At Lewisham Hospital in 1994, 98 fetal cadavers were sent to the mortuary.

No postmortem examination was performed on seven, and a full examination was performed on 64. In the remaining 27 cases x ray films were obtained, photographs and measurements taken, and a clinical abstract and the external appearances recorded. Often the results of full placental examination, including histological findings, are given in these reports, which are routinely prepared when consent for dissection is withheld. These reports are also valuable to the obstetrician and the geneticist and should not be ignored when the rate of postmortem examinations is assessed.

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- 1 Chiswick M. Perinatal and infant postmortem examination. BM7
- 1995;310:141-2. (21 January.)
 2 Cartlidge PHT, Dawson AT, Stewart JH, Vujanic GM. Value and quality of perinatal and infant postmortem examinations: cohort analysis of 400 consecutive deaths. BM7 1995;310:

Paediatricians' opinions are also important

EDITOR,—The recommendation that more accurate diagnosis would be achieved and more appropriate help given to families if paediatricians ensured that an experienced pathologist performed a necropsy on more than three quarters of neonates and infants who die is probably correct.12 The other side of the coin, however, should also be considered. Of those infants who have not been under the care of a paediatrician and on whom a necropsy is performed after they die suddenly, what proportion had their health and life before death critically appraised by an experienced paediatrician? Would not the accuracy of the diagnosis be improved if such a paediatric appraisal always took place? The diagnosis emerges from a combination of the history and the findings at necropsy; currently errors occur when the necropsy findings are viewed as the gold standard in isolation. The opinion of an experienced paediatrician is required to confirm that the diagnosis based on the necrosy findings fits the circumstances of the child's health before death and the developmental capabilities of the child.

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- 1 Cartlidge PHT, Dawson AT, Stewart JH, Vujanic GM. Value and quality of perinatal and infant postmortem examinations: cohort analysis of 400 consecutive deaths. BMJ 1995;310: 155-8. (21 January.)
- 2 Chiswick M. Perinatal and infant postmortem examination. BMJ 1995;310:141-2. (21 January.)

Survey of women's reactions to perinatal necropsy

EDITOR,—In a recent postal questionnaire survey of parents' satisfaction with the arrangements pertaining to postmortem examination after perinatal loss we found evidence to support Malcolm Chiswick's contention that seeking parental consent for postmortem examinations requires communication skills and experience.1 We would suggest that communicating the findings of the examination requires similar skills and experience.

In mid-1994 a member of the social work department telephoned women who had had a perinatal loss-a termination of pregnancy for conditions diagnosed antenatally, spontaneous abortion, stillbirth, or neonatal death-at the Queen Victoria Hospital in 1992 and 1993, explaining the aims of the study. Twenty nine women agreed to participate. The questionnaire allowed the women or their partners, or both, to express their feelings regarding various aspects of the necropsy (table).