4. Overview and discussion

The overall quality of autopsy reports

The study examined the autopsy reports, and supporting documentation that came from coroners' offices, concerning all deaths (in the community and in hospitals) over a one week period. Importantly, the study was retrospective and the relevant coroners and pathologists were not aware at the time of autopsy that the reports would be examined. The overall picture that emerged from the examination of autopsy reports from all coronial autopsies (with the exception of suspected homicide) was of unacceptable heterogeneity. This lack of standardisation is the fundamental point and the basis of the principal recommendation that NCEPOD makes.

The quality of the autopsy report was judged to be satisfactory in 52% (873/1,691), good or excellent in a further 23% (382/1,691); but was poor or unacceptable in 26% (436/1,691). Satisfactory indicates that the basic clinical question over cause of death appears to have been answered, and that the autopsy report fulfils its main purpose of documenting the cause of death but without much elaboration or detail that distinguishes a good or excellent report. Unacceptable means that the autopsy report does not sufficiently explain the cause of death (or it is evidently wrong) and that the report falls below an acceptable standard that the advisors believed that the public would expect, calling into question the practice of the pathologist and the constraints of the system in which they operate.

Reflecting the 2003 report of a fundamental review into death certification and investigation in England, Wales and Northern Ireland[1] , if one quarter of all surgical procedures undertaken on the living were deemed, by peers, to be poorly or unacceptably badly done, there would be a public outcry. The fact that there is no outcry is a simple manifestation of the fact that families are unaware of the variable quality of the autopsy procedure. Given the invasiveness of the autopsy, the taboo surrounding the procedure, and that it should not be done lightly, one might expect that the autopsy process and the whole system in which it operates would function to a high standard.

Occasionally, a family's dissatisfaction with an autopsy diagnosis surfaces to public notice. Anecdotally the pathologist advisors knew of legal complaints against hospitals and individuals based on what turned out to be erroneous and misleading autopsy reports. Senior clinical colleagues may approach hospital pathologists with what they consider to be unsatisfactory coronial autopsy reports on their patients following examination in another mortuary away from the hospital. It would benefit all interested parties if clinicians could observe autopsies, and discuss the findings with pathologists, more often. They are entitled to do this under Coroners Rules 7 & 8, but often are not informed of the place and time of the autopsy; and may have clinical commitments that prevent their attendance. This study did not investigate whether or not clinicians attended autopsies on their patients. But overall there has been no public protest over quality. All this reflects the lack of audit of the procedure.

Specific points of concern from the autopsy reports

There were particular issues that the advisors considered important:

- one in four autopsy reports was judged as poor or unacceptable;
- in one third of mortuaries, the pathologist failed to inspect the body before the anatomical pathology technologist commenced opening it and removed the organs;
- in one in seven cases the brain was not examined;
- in one in sixteen cases, it was deemed that histology should have been taken in order to determine or fully elucidate the cause of death;
- in nearly one in five cases, the cause of death as stated appeared questionable;
- the extent of examination of the heart, in those with abnormalities that might be due to a cardiomyopathy (some of which are inherited), was poor;
- the extent of examination of patients with known epilepsy who died unexpectedly was poor;
- the very elderly may not have been examined as carefully as younger subjects;
- the poor recording of the presence or absence of external injuries;
- the extent of examination of decomposed bodies;
- poor communication between coroners and pathologists;
- apparent gaps in the information provided to the pathologists by the coroner.

Several of these points require further discussion.

One quarter of the reports was judged as poor or unacceptable and, in nearly one in five, the stated cause of death itself was questioned. For medical processes, these are large rates of poor quality and reflect the historical lack of audit over the coronial autopsy. Fundamentally it reflects the gulf in attitude between the NHS, which looks after most people during life, and the Home Office or Dept of Constitutional Affairs which manages the investigation of their deaths through coroners: the only common element is the cadre of pathologists, who are well aware of the different standards expected in their NHS versus coronial practices.

The under use of histopathology and other investigations, the frequent poor examination of the heart in cases of sudden unexpected death, and the insufficient evaluation of patients with epilepsy who died, all reflect a lowered set of expectations of accuracy in cause of death. This level would not be tolerated by clinicians who obtain a consented autopsy, clinicians who are often puzzled by the apparent dual standards displayed by pathologists when undertaking autopsies with the production of a cause of death acceptable to a coroner.

From the data in the study, two other groups of deceased patients appeared not to be well served by the coronial autopsy process: the decomposed person and the very elderly patient, where the reports suggested that the examinations were often cursory. The former may have little to show pathologically, and expectations of useful positive findings are depressed. The latter often have too many positive pathological findings (as a consequence of age) and it may be difficult to determine which, if any, are directly relevant to the cause of death. A more precise remit for the autopsy in these cases would be beneficial, to focus the questions that are being

asked concerning their deaths.

A large number of autopsy reports on deaths in the community lacked descriptions or exclusions of external injuries. It is possible that some of these patients had suffered significant injury that contributed to death, whether from spontaneous falls or even possibly by the hands of a third party. The remarkable proportion of autopsies 14% (238/1,691) where the head was not opened and the brain not examined reinforces the impression that significant pathology may be going unnoticed. Anecdotally, the pathologist advisors had collective experience of second autopsies, following a limited coronial first examination, where the head was finally opened to reveal the actual cause of death, e.g. intracranial haemorrhage, in contrast to the first cause of death of ischaemic heart disease based on unconvincing findings.

The practice of pathologists arriving at a mortuary to find that the bodies for examination have already been opened and the organs removed is evidently still widespread from the data in the study. Nearly all the advisors, irrespective of profession, found this practice poor, as it has the potential to remove significant indicators of certain pathological conditions and thus reduce the quality of the autopsy and its report. The possible reasons for the practice have been adduced, the main one probably being pressure of time on the pathologist. Like the non-opening of the head in many cases, this issue requires a wider discussion amongst all the interested parties. Unlike the head issue, however, the only proper conclusion should be that it should cease and that the pathologist must be present when the autopsy commences.

Finally, much comes down to communication between coroners, their officers, and the pathologists they request to undertake autopsy examinations. As well as the often defective information provided by the former, there is no uniform standard regarding what the pathologist is, or is not, expected to find out for him/herself regarding previous relevant medical or scene of death history. As evidenced from the detailed histories and clinicopathological summaries in some reports, there is a body of pathologists who are committed to performing at a high level, and answering all the questions raised by a death. And there are others whose performance level appears to be more perfunctory. The implicit and overt expectations of those who request and those who perform autopsies must be relevant here, and fundamentally reflect the basic ambiguity: what is the coronial autopsy for, and who are the interested parties?