# 3. Results of study

## **Case history**

After the demographic data, an autopsy report usually contains a case history which describes the past and recent known medical history of the patient including medications, and the events that occurred around the time of death. Case history, if present, as documented in the report by the pathologist is not necessarily based on that from the coroner.

Of all cases assessed, 79% (1,340/1,691) contained a case or clinical history within the autopsy report. This figure is slightly lower than the figures quoted in previous NCEPOD reports (which have fluctuated between 84% and 89% in reports published by NCEPOD since 2000. However, the previous NCEPOD reports only included hospital deaths, which may account for a higher proportion of cases with a clinical history being included in the autopsy report as they may have more complex scenarios of death). In those reports without a history present, a common statement was "history as provided by the coroner".

The RCPath guidelines<sup>2</sup> state that a history should always be included. However, the data requirements for an autopsy report as listed in Schedule 2 of the Coroners Rules do not include a history of the case. Nonetheless, a standard text on coronial autopsies states: "The report should contain a clinical history to make clear the context of the examination...However there is some variance as to the level of detail that may be thought appropriate".

Of the reports that did include a history, 72% (971/1,340) were essentially identical to that provided by the supporting documentation (where supporting documentation was available). Of these, it was considered that in 167 cases, additional history would have been useful to make clear the context of the autopsy. As the advisors discussed throughout the study, there is no agreement among pathologists or coroners as to the effort a pathologist should take to determine and record relevant history beyond that provided by the coroner. It is evident that in some of the reports the pathologists did make this effort, and the outcome in terms of quality grading was positive (Table 8). One standard text on the coronial system also makes the point about pathologists repeating, word for word, the entire history given them from the coroner. It continues "this is quite unnecessary and can lead to problems when any of these details are disputed by the family"<sup>4</sup>.

In only 10% (128/1,340) of reports, that included a history, did the history specify clinical questions to be addressed at the autopsy. This has not been an official recommendation from any organisation to date, but makes sense as it indicates the perceived issues raised by the death as seen through the eyes of the coroner and clinicians, and enables the pathologist to reflect on whether the autopsy has answered them satisfactorily. The autopsy may, of course, raise additional issues as well as resolving those considered at the time of death, and the whole case is then summarised and explained in the clinicopathological correlation. Two examples where a clinical question was included as part of the autopsy report's history are presented (case studies 4 and 5).

### Case study 4

A middle-aged female had a 25 year history of multiple sclerosis which had left her chair bound. She had been seen recently by her GP for vulval thrush and she also reported recent tiredness and breathlessness. She collapsed at home and although a doctor was called and cardiopulmonary resuscitation was attempted she died at home. The clinical question posed by the coroner was "Query cardiac event?"

The autopsy diagnosis was:

- 1a. Hypertensive and ischaemic heart disease
- 1b. Multiple sclerosis

The autopsy findings were well described; the conclusions coherent; and the query answered.

#### Case study 5

The deceased was found at 08:30 in the morning in the downstairs toilet, slumped on the floor, after returning from a night shift. The ambulance staff suggested that the deceased had had a cardiac arrest, fallen off the toilet and banged their head on the washing machine. The coroner asked "Query if head injury is cause of death".

The autopsy diagnosis was:

- 1a. Pulmonary embolism
- 1b. Deep vein thrombosis

The organs were all well described; deep vein thrombosis confirmed in the calf muscle and a head injury excluded.

Overall, the advisors rated the history to be good or satisfactory in 89% of the reports (Table 8).

Table 8: Quality of the history as presented in the autopsy report		
	n=	%
Good	242	18
Satisfactory	957	71
Unsatisfactory	141	11
TOTAL	1340	100
Not answered	351	

Advisors commonly noted the following reasons where a history was marked as unsatisfactory. The autopsy report:

- omitted important past medical history (including medications);
- omitted information that was available in the supporting documentation;
- omitted important occupational history / exposure;
- was generally too brief, which gave insufficient details about the circumstances of the death.

When the overall quality of the history was stratified with location of autopsy (local authority or hospital mortuary), no difference was observed in terms of quality. When examining the advisors' opinion of the overall quality of the autopsy report in cases that did or did not contain a history, proportionately more reports were being marked as good or excellent if they contained a history (Figure 6).

800 700 Number of cases 600 500 400 300 200 100 0 Excellent Good Satisfactory Poor Unacceptable Quality of the autopsy report No Yes

Figure 6: Quality of the autopsy report in cases that did or did not include a history

The RCPath recommend in their 2002 Guidelines on Autopsy Practice that an autopsy report should include a minimum dataset, which will normally include clinical history and how it was obtained. The equivalent autopsy practice guidelines in America (developed by the Autopsy Committee of the College of American Pathologists) also recommend that a clinical history is included in the autopsy report. Their guidelines state:

"Writing a clinical history summary enables the pathologist to address specific concerns and questions of the clinical staff regarding a patient's disease processes. Items to be considered include the following: age, gender, ethnic origin, occupation, established medical conditions and diagnoses, risk factors or characteristics pertinent to the disease processes identified, hospitalisations, surgeries, medications and pertinent laboratory data".

Like RCPath and the College of American Pathologists, NCEPOD considers a history to be useful for readers of the autopsy report to help them to understand the context of the autopsy in the absence of any prior knowledge about the death.

Autopsy reports potentially have a wide readership. Their quality and utility in the eyes of the readers can only be enhanced by including the medical history. In a few coronial jurisdictions, however, even the pathologist is not authorised to retain a copy of the report. The Coroners Rule 10(2) states that "unless authorised by the coroner, the person making a postmortem

examination shall not supply a copy of his report to any person other than the coroner." Despite this, and in most jurisdictions, there is an increasing tendency for dissemination of reports to interested parties; as well as the pathologist, this includes relevant clinicians in hospital and general practice, families, and confidential enquiries. This is usually done with generic permission of coroners, the main exceptions being in cases where a potentially contentious inquest is forthcoming and the coroner wishes to have clinical reports unaffected (if that is possible) by detailed knowledge of the autopsy report. There has been no formal survey of families' attitudes to autopsy reports, but anecdotally the advisors felt that many families appreciate comprehensive reports that better assist them in understanding what happened and thereby to come to terms with the death.

However, there are acknowledged problems in the incorporation of a history in an autopsy report. It may be factually incorrect in minor or major aspects, as is inevitable in the process of collating information from many possible sources. Although this study found that the great majority of histories merely copied that which was presented by the coroner's office, some pathologists did provide more from their own examination of other records and from discussing the case with clinicians. It is easy to get facts wrong, as typographical errors or as misunderstandings, or because the actual source records are incorrect. Dates of operation, the precise procedure performed, laboratory data - all these may be stated incorrectly in the history. If the family observes such unintended errors and considers them significant, it can undermine confidence in the whole autopsy report and its conclusions. This leads to problems disentangling the facts at inquest, and even complaints against clinicians and health care units. A partial resolution to this issue is to indicate clearly the provenance of the history as presented; whether it came solely from the coroner's office, or with contributions from other named persons, or from the medical records etc.

Twenty one percent of the autopsy reports in this study had no history, which is congruent with the knowledge that many instructing coroners do not wish to have the history within the autopsy report. In situations where this pertains, a compromise is recommended: that the history is presented on a separate page to that of the main body of the report. This will allow the coroner to detach the history from the main body of the report if required.

#### Recommendation

A clinical and case history should be included in an autopsy report and should state the provenance of the information.