

# FORENSIC PATHOLOGY SPECIALIST GROUP

## AUDIT OF THE WORK OF FORENSIC PATHOLOGISTS – 2011

### INTRODUCTION

- 1 The Forensic Pathology Specialist Group (FPSG) advises the Forensic Science Regulator on matters involving forensic pathology. One of the Group's responsibilities is the oversight of standards, and in order to acquit this responsibility a programme of audit of the casework carried out by forensic pathologists was introduced. The 2011 audit is the second exercise in this series. Practitioners operating in England and Wales are registered with the Home Office and were required to participate in the audit; forensic pathologists working in Northern Ireland also agreed to participate in the exercise. Although Scotland is represented on the FPSG, pathologists in this country again took the decision not to participate.
- 2 It was decided by the FPSG that, as far as was practical, audit exercises should be held annually. It was also agreed that it would be useful if each exercise focused on a specific type of post mortem examination. The exercise now being reported was designed to focus on the investigation of homicidal asphyxia.
- 3 Each participating pathologist was asked to submit two specific case reports for audit. One was to be the first case of homicide by mechanical asphyxia investigated after 1<sup>st</sup> September 2009. This might include, for instance, external compression of the neck, smothering, suffocation, or homicidal crush asphyxia. For the sake of convenience the individual cases in this series are henceforth referred to as the 'homicide' cases. The second was to be the next case of hanging involving a police investigation dealt with immediately following the homicide case. These cases are subsequently referred to as the 'non-homicide' cases. A date in 2009 was chosen in order to select for audit cases which were no longer 'live'.
- 4 The request to submit material was made in September 2011. Only the report as issued to the coroner and/or police was requested, not notes or other supplementary material. The decision to restrict the material submitted for scrutiny gave rise to difficulties in one or two cases in the 2010 audit, in that information with a significant bearing on the investigation may have been in the possession of the pathologist but not referred to in his/her report. However, the original submission procedure was retained, on the basis that a pathologist's report should be sufficiently comprehensive that it can stand alone.
- 5 Participants were also asked to complete a short questionnaire in connection with the homicide case – to ascertain whether a suspect had been identified; whether the offender offered a guilty plea; and whether (s)he was convicted. It also asked whether the practitioner had been called to give evidence in person at trial. It was hoped that the information so obtained would provide some background to the circumstances of the investigation.
- 6 The make-up of the audit team remained as for the 2010 exercise. Four forensic pathologists scrutinised the material for its technical quality. A coroner and two police senior investigating officers (SIO) were asked to offer a lay perspective on the material, each from his own specific viewpoint.
- 7 Participants were requested to remove all identifying detail – names of deceased and pathologist, addresses, location of mortuary, etc – prior to submission of the report to the co-ordinator.

- 8 There are certain legal declarations which must form part of all pathologists' reports. In some instances these were present; in others they appeared to have been removed during the anonymisation process. Accordingly no comment has been made on their presence or otherwise during the audit. Practitioners are, however, reminded of the requirement to include the appropriate declarations before they issue a report.
- 9 Each case was assigned a unique reference number on receipt by the co-ordinator of the audit, who maintained the sole key to the code. The protocol for the audit stipulated that the key could be broken only if identification of the case was deemed essential to prevent a potential miscarriage of justice, and then only with the agreement of the Chair of the FPSG. When all the results of the audit had been finalised, each participant was provided with confidential feedback on the two cases which (s)he submitted.
- 10 Case reports (71 in total) were submitted electronically and passed by the co-ordinator to the auditors. Initially each case was given to two pathologist members of the team and to one of the SIOs. One case in two was assigned to the coroner. In the event one of the senior investigating officers failed to complete his scrutiny of the material. Accordingly, lay assessment was completed on only 35 of the cases submitted.
- 11 The format of the audit duplicated that used in the first exercise. Auditors used proformas to record their assessments. The pathologists assessed reports against the technical standards laid out in the 2004 *Code of Practice and Performance Standards for Forensic Pathologists* issued jointly by the Home Office and the Royal College of Pathologists. Individual elements of the report were assessed either as **acceptable** or giving some **cause for concern**. Free text comment was added as necessary and appropriate comments form the basis of this audit report.
- 12 The non-medical auditors judged the material against criteria chosen to assess both the potential usefulness and comprehensibility of the report to the lay reader. Although they played a somewhat more limited role in the exercise, their views were considered particularly important in relation to the issues surrounding the value of the report to the end user. For simplicity the marking scheme was similar to that employed by the medical auditors, with comments added as appropriate. Auditors' assessments were returned to the co-ordinator for collation and preparation of the final report.
- 13 In the event that any member of the audit team was concerned about a case – for whatever reason – it was agreed that the case in question should be recirculated in order that other members of the team would have the opportunity to examine and discuss the material. During the course of this audit concerns were identified in five cases, four homicide and one non-homicide. These cases were resubmitted to all four pathologists for scrutiny in line with the protocol.
- 14 After reconsideration the consensus of opinion was that all bar one of these cases was acceptable. This information was provided in feedback to the individual practitioners involved, accompanied by appropriate comment which in one case was extensive. The remaining case was judged after reconsideration to give cause for concern. In this instance the auditors were not entirely convinced that the final interpretation provided by the pathologist was correct, although it certainly could have been. The pathologist was provided with a detailed critique of his report expressing the auditors' concerns.

## AUDIT RESULTS

### Introduction

- 15 The various aspects of the report were assessed against the headings detailed in Section 7 of the 2004 Code of Practice 'The pathologist's autopsy report', as in the first round of audit. The standard of the material in this audit was consistently high, and very similar to that observed in the previous exercise. However, certain aspects of the scrutiny of this group of cases raised concerns. These are detailed below and have also been reported directly to the practitioners involved.
- 16 The sole document requested for audit was the report as issued to the coroner and prosecuting authority. The auditors recognised that other explanatory material may also have been produced by the pathologist in connection with the cases submitted for the audit.
- 17 It was intended that the information provided by the questionnaire (see 5 above) might indicate the relative importance of the pathological examination in the context of all the evidence available to the prosecution. For instance, if a guilty plea had already been entered for the case it might perhaps be acceptable for a less comprehensive (although still thorough and of a high standard) examination to have taken place.
- 18 It is probably appropriate to stress once again an essential theme of the Code of Practice; that a pathologist's report should stand on its own. It should not require other documentation to facilitate its interpretation.
- 19 The comments noted in this report highlight aspects of a pathologist's case report which auditors considered particularly good, as well as areas which appear to diverge from best practice as recommended in the Code of Practice. The latter comments should not be seen as condemnatory; rather they are intended to facilitate the raising of standards overall.

#### 7.2.1 General comments

- 20 *The report or statement must be clearly laid out, section by section, in an easily read format. There are a number of statutory declarations to be made regarding the pathologist's status as an expert witness.*
- 21 The Code does not specify any particular format and pathologists develop their own style. In many reports submitted for audit the declarations were absent (as noted in 8 above) and accordingly no judgements were made on this matter.

#### 7.2.2 Preamble

- 22 *The preamble should set out details of the deceased and of the autopsy.*
- 23 Much of this information had been removed during anonymisation and no judgements were made.

#### 7.2.3 History

- 24 *In this section the pathologist is expected to summarise information provided to him before the autopsy is performed. The Code requires this information to be recorded in full with an acknowledgement that where the information has been obtained from others, rather than being the pathologist's own observations or experience, the pathologist cannot vouch for its accuracy or veracity.*
- 25 Some concerns were expressed about the narrative of the circumstances of the case at the beginning of the report. Accepting that the information is 'hearsay', and often the results of preliminary enquiries and therefore potentially factually inaccurate, it seemed that some of the synopses of events were detailed to the point of rambling and obfuscation. These included minutiae, sometimes related to other witnesses, seemingly irrelevant to the interpretation of the examination. Care clearly must be taken in relation to the inclusion in a report of evidence relating to other witnesses.

26 It was noted that some authors offered a very brief history, while others were over-expansive. This may be an area which should be studied more carefully by practitioners, with clearer guidelines offered as to what should be included.

#### **7.2.4 Scene of the death**

27 *Under this heading pathologists are expected to note full details of the scene of discovery of the body. It is recognised, however, that in many cases the body may be removed for emergency medical treatment prior to death and the scene may therefore possess little of relevance to the pathologist.*

28 Not all cases require the attendance of the pathologist at the scene of the incident. There was no evidence that a pathologist had failed to attend a scene at which useful information might have been obtained. The scene was visited in 21 cases (30% of the total, and including 16 homicides and 5 non-homicides). All were recorded satisfactorily, with four reports containing very detailed descriptions. One report referred to an 'attached' scene visit report but this was not included.

29 In 14 cases where the pathologist had not visited the scene there had instead been an examination either of still photographs or a video recording. In most of these it was clear that examination of such images had proved useful to the practitioner.

30 It was noted in one case that no reason had been given for the absence of appropriate action at the scene, and in another that there was no record that relevant swabs had been taken. These instances may simply represent failure to record precisely what took place at the scene and, while this does not necessarily reflect inadequate performance by the practitioner, the Code does stipulate that all relevant information should be recorded.

#### **7.2.5 The external appearance of the body**

31 *The pathologist should record in detail the external appearance of the body, including its state on arrival in the mortuary, and the presence and distribution of bloodstaining. An inventory should be made of clothing as it is removed from the body.*

32 No working scales for weighing the body were available in five of the mortuaries at the time of examination, and in one such instance the body weight was estimated. In another case no body weight was recorded, with no reason stated. Similar comment was made in the previous audit report and the problem was subsequently addressed by the National Policing Improvement Agency. However, the post mortem examinations reported in the current exercise would have been carried out before this attention had been given to the lack of facilities.

33 No height was recorded in two cases.

34 The external appearance of the body was described in a satisfactory manner, although in six cases this description was brief.

35 In two cases auditors found that the description of the marks on the neck lacked detail, commenting that the location of a ligature in relation to the ears and the angle above the horizontal should have been noted.

36 More than one practitioner used the phrase 'there were no other significant external abnormalities'. While this is a commonly used form of words auditors consider best practice is to report findings as straightforward facts, with questions of the significance of such findings addressed in the report's conclusions.

#### **7.2.6 Injuries**

37 *Injuries, however slight, must be described in detail, using recognised terms and appropriate measurements. Their location should be noted in relation to anatomical landmarks. Where there are many injuries a clear numbering system should be employed in the report to aid identification. Lack of suitable numbering could render subsequent reference to the report more difficult, for instance when giving evidence in court.*

- 38 The description of the injuries was satisfactory in most cases although there was a number of instances in which injuries could have been more fully and logically described.
- 39 Lesions should be given a clear topographical description, which is probably best related to fixed anatomical points rather than to other lesions. It should be clear when describing the location of such lesions which part of the wound, eg 'centre', is being documented. The orientation of an injury may also be important. Injuries, particularly internal wounds, are likely to have three dimensions which should wherever possible be recorded.
- 40 Given that the theme of this audit was homicidal asphyxia it was anticipated there would be particular focus on the neck area. A number of cases which gave rise to specific concerns which will be considered later in this report.

#### **7.2.7 The internal examination**

- 41 *The internal examination must follow the Royal College of Pathologists' Guidelines on Autopsy Practice. Particular note must be made of diseased or injured organs. Report sub-headings may be useful in organising the information. Organ weights should be recorded.*
- 42 In the previous audit there was relatively little to report under this heading, and this was also true of many of the cases examined during this exercise. However, auditors identified a range of concerns about the specific area of interest in the post mortem examination.
- 43 In 16 cases (23% of the total, including 6 homicides) the report provided no evidence that an appropriate sequence had been followed during dissection of the neck. Auditors accordingly queried whether a layered dissection of the neck had been performed, following full exsanguination and after removal of the brain and the chest organs. This protocol is recommended as best practice by the Royal College of Pathologists.
- 44 Auditors consider it valuable to describe in full the way in which the neck structures have been dissected, and to record compliance with the appropriate protocol.
- 45 In 6 custodial deaths there was no indication that subcutaneous dissection of the back and upper limbs had been carried out. Such an examination might have been important in the light of restraint possibly having been applied by a third party, for example through the finding of grip marks. The auditors do not believe that a history of being alone in a cell, etc should be taken at face value.
- 46 In one case injuries and petechial haemorrhages were not found until a second post mortem carried out some six days after the first examination – the haemorrhages described as being masked by congestion at the time of the first examination.
- 47 It may be that guidance included in the Code of Practice on dissection of the neck structures should be reviewed with these observations in mind.

#### **7.2.8 Supplementary examinations carried out**

- 48 *The involvement of other specialists should be included under this heading, and the results of their examinations noted. Most cases will involve toxicological examination, and specialisms such as paediatric pathology, radiology, etc will be included where appropriate.*
- 49 There is relatively little requiring comment under this heading. Appropriate histology and toxicology had been carried out in the vast majority of cases. A small number of cases had been reported before the toxicology results had been received; it is clear that toxicology investigations still take a considerable time.
- 50 It was stated in one case that the taking of samples for histology had not been permitted by the coroner. Similar refusals to give permission for histological

examination were recorded in the previous exercise. Auditors retain an underlying anxiety that refusal by coroners to sanction such work may still present difficulties in some cases.

### **7.2.9 Commentary and conclusions offered by the pathologist**

- 51 *In this section the pathologist should explain the cause and mechanism of the death, using language which is precise and accurate in medical terms but also readily comprehensible to the lay reader. It is primarily from the commentary and conclusions that the police and prosecuting authorities will have to assess the relevance of the medical evidence to their consideration of the case.*
- 52 Nine cases (13% of the total submitted for audit) attracted specific positive comment such as 'thorough', 'fair comment in a difficult case' and 'discursive and well referenced commentary'. A further six cases were described as brief, but were considered adequate in the circumstances of the case.
- 53 One difficult case contained a detailed assessment of the witness evidence, with a thorough assessment of the potential factors giving rise to the death. While one of the witnesses suggested there had been a significant degree of neck compression the pathologist had concluded that death could not be ascribed simply to this event. The pathologist had clearly considered all the various possibilities and arrived at a logical conclusion. However, the auditors also considered that the volume of witness evidence quoted verbatim made the report rather difficult to follow.
- 54 The possible significance of natural disease in relation to the death always needs to be considered by the pathologist and discussed in the commentary.
- 55 The cause of death must be stated definitively. Where this is not possible the pathologist may be able to offer different possibilities, although sometimes the cause must remain unascertained. In any event the reader should be left in no doubt that the pathologist's conclusions have been properly and thoroughly considered, and then clearly expressed.

### **7.2.10 Identification of the cause of death**

- 56 *This is normally expressed in the manner approved by the Registrar General, although it is often important to elaborate on the information for those who may be unfamiliar with the format.*
- 57 A variety of phrases was used in the homicide case, for instance 'consistent with neck compression' and 'asphyxia due to interference with the normal mechanics of breathing'. These were all considered appropriate in the circumstances of the case involved.
- 58 A similar range of phrases was employed in the other cases submitted. For instance, 'suspension' and 'ligature of the neck (consistent with hanging)'. Auditors sometimes expressed surprise that the cause of death had not been described simply as 'hanging'. However, all descriptions appeared acceptable in the context of the case.

### **7.2.11 Retention of relevant samples during the examination**

- 59 The report should accurately record what materials have been retained and where they are stored. Several reports stated this clearly, but because in others the information had obviously been redacted during the anonymisation procedure, no judgements were made.

### **7.2.12 Comments on the layout or format of the report**

- 60 Reports were checked for ease of reading, logic of the setting out of the findings, typographical errors, etc. In this series of cases it was expected that, in particular, examination of the head and neck would be thorough and documented in a logical manner with conclusions spelled out in terms readily understood by anyone who would need to use the report.

- 61 The forensic pathologist's report is intended for use by more than one audience. It must be technically sound and acceptable to other medical professionals, while remaining accessible for the lay reader who will need to understand its substance and implications.
- 62 As a matter of best practice, auditors consider that reports should be laid out in logically arranged sections with appropriate headings. For instance, it may be useful to differentiate old and recent injuries. These should be clearly recorded under anatomical zones, eg head, trunk, right upper limb, etc. It may also be useful to separate fatal and non-fatal injuries.
- 63 All the reports submitted for examination were considered acceptable; some 30 cases (42%) attracted additional comments such as 'very good', 'detailed' and 'thorough'. Other comments referred to aspects of the case already dealt with under previous headings.
- 64 Typographic errors were drawn attention to in the previous audit, and a few further examples were noted in this exercise. While not necessarily of major importance, nor critical in the context of the report, it is possible they may induce an impression that the writer has not taken enough care with his or her work.

### **Comments made by lay auditors**

- 65 The lay auditors performed a different, but equally valuable role, from that of the medical audit team. They assessed, from their own particular viewpoints, how useful the report might have been to them in furthering their understanding of the cause and circumstances of the death. In this regard the 'Commentary and Conclusions' section was usually found to be the most relevant section of the report.
- 66 It was considered that clear exposition of the findings through the use of a logical format proved most useful. Explanation of some of the more important medical terms was also helpful.
- 67 In three cases the lay assessment did not parallel the comments made by the pathologist auditors. For instance, one report which the lay auditor found to be both clear and easy to follow was criticised by the pathologist auditors because the possible contribution of natural disease to the death had not been fully explored. It is not entirely surprising that such a deficiency in the examination would be obvious only to the medical professionals.
- 68 This finding emphasises the importance of setting out in detail all the relevant information, explaining it in straightforward language and putting it into context. It should be at the forefront of the pathologist's mind that evidence contained in the report will be used by a succession of non-medical readers during its passage through the criminal justice system, and that some technical issues may require extra explanation.

### **Results of the questionnaire**

- 69 Participants were asked to complete a questionnaire in respect of the homicide case which they submitted for the audit. This posed four questions:
- Had a suspect been identified at the time of your examination?
  - Was there a guilty plea?
  - Did you have to appear in court to give oral evidence?
  - Was the suspect convicted of the offence?
- 70 Only 63% of participants completed the questionnaire, with some others responding that the information was not available. In the 22 cases for which information was provided, about 1 accused person in 4 (23%) submitted a guilty plea. Overall, a conviction was obtained in 15 (68%) of the cases. Of the remaining cases, no trial had yet taken place (4 cases) or the alleged offender was dead (2 cases). Only one

trial resulted in an acquittal. The pathologist appeared in court to provide oral evidence in 77% of the cases.

- 71 It is difficult to see what useful conclusions, if any, can be drawn from these figures. It could perhaps be argued that a less detailed report *might* be acceptable where an offender has already entered a guilty plea for the assault. A number of reports were indeed described as brief but acceptable. Unfortunately, however, the very limited evidence available indicated that, if anything, these shorter reports were correlated with a failure to respond to the questionnaire.

## **RECOMMENDATIONS**

- 72 It is recognized that pathologists undertake their post mortem examinations in the light of the information provided by the investigating team, and that this may possibly influence the way in which they go about their task. The material requested for audit will be reviewed again, in order to ensure that auditors are made aware of the full range of information available to the pathologist when the examination is undertaken (16-17).
- 73 The 'history' section of the pathologist's report records this background information. Some may come from the practitioner's own observations, but much will rely on information offered by others involved in the investigation. While this latter is likely to be the best information available at the time, it may not in fact prove to be accurate and this status must be reflected in the pathologist's report. It was noted that some authors offered a very brief history, while others were over-expansive. It may be appropriate to review both the form and function of the history, with a view to issuing guidelines as to its content and format (25-26).
- 74 Royal College of Pathologists guidelines specify the manner in which dissection of the neck structures should be carried out. It was not always obvious, however, that this protocol had been followed appropriately. It may be that guidance included in the Code of Practice on such dissection should be reviewed with these observations in mind (43-44).
- 75 It may be appropriate to review the way in which lay assessments are carried out in order to ensure that any differences in interpretation or emphasis can be identified during the audit process (65-68). It is essential that the full import of the pathologist's findings is made clear to the non-medical users of the pathologist's report. There should be no possibility of misinterpretation of critical findings.

## **CONCLUSIONS**

- 76 This was the second in the series of audits of the work of forensic pathologists carried out on behalf of the Forensic Pathology Specialist Group. Case reports were submitted by Home Office registered pathologists plus forensic practitioners operating within Northern Ireland. The reports submitted for this exercise were of a high standard; some were noted as being particularly good. However, a number of issues have been highlighted by this exercise which may require consideration by the FPSG and other appropriate bodies.