Communicating Pathology and Laboratory Errors

Anatomic Pathologists’ and Laboratory Medical Directors’ Attitudes and Experiences

Suzanne M. Dintzis, MD, PhD,1 Galina Y. Stetsenko, MD,2 Colleen M. Sitlani, MS,4 Ann M. Gronowski, PhD,5 Michael L. Astion, MD, PhD,2 and Thomas H. Gallagher, MD3

Key Words: Quality assurance; Disclosure outcomes; Communication; Patient safety

Abstract

Physicians are urged to communicate more openly following medical errors, but little is known about pathologists’ attitudes about reporting errors to their institution and disclosing them to patients. We undertook a survey to characterize pathologists’ and laboratory medical directors’ attitudes and experience regarding the communication of errors with hospitals, treating physicians, and affected patients. We invited 260 practicing pathologists and 81 academic hospital laboratory medical directors to participate in a self-administered survey. This survey included questions regarding estimated error rates and barriers to and experience with error disclosure. The majority of respondents (~95%) reported having been involved with an error, and respondents expressed near unanimous belief that errors should be disclosed to hospitals, colleagues, and affected patients; however, only about 48% thought that current error reporting systems were adequate. In addition, pathologists expressed discomfort with their communication skills in regard to error disclosure. Improving error reporting systems and developing robust disclosure training could help prevent future errors, improving patient safety and trust.

Following the publication of the Institute of Medicine report detailing the frequency and cause of medical error,1 pathologists, like their peers in other medical specialties, began to focus on strategies to reduce error within their practices.2-8 Specialty associations, including the College of American Pathologists and the Association of Directors of Anatomic and Surgical Pathology, have published recommendations regarding error mitigation.9-11 Many practices have followed these recommendations and seen successful reduction in systems error.

Despite these efforts, serious pathology errors will inevitably occur. The patient safety movement emphasizes not only error reduction but also the importance of greater transparency in the discussion of medical errors with other health care workers and with affected patients. Unfortunately, errors are underreported, and most patients receive little or no information about errors in their care.12-14 Open discussion of error, including formally reporting error to the institution, is essential to understand the cause of the event and reduce or prevent recurrences.15 Disclosure of serious error to patients could enhance patient trust in their physicians and increase satisfaction with the integrity of the health care system.16,17 Error disclosure is recommended as an ethical obligation and to comply with emerging standards and regulations.18,19

Pathologists and laboratory medical directors face unique challenges related to error reporting and disclosure because they traditionally have no prior relationship with the affected patient.20 By using a survey including questions regarding error rates, barriers to error disclosure, and experience with pathology and laboratory error disclosure, we assessed the attitudes of anatomic pathologists and laboratory medical directors toward error disclosure. We describe how these
perts currently communicate about errors with their institutions, colleagues, and patients.

Materials and Methods

In April 2009, we invited 260 practicing anatomic pathologists belonging to a regional multistate society of pathologists in the US Pacific Northwest and/or a state society for pathologists, also in the Western United States, to participate in a self-administered mailed survey, based on prior surveys of internists, surgeons, and pediatricians. In addition, 81 academic hospital laboratory medical directors at 2 university-based health systems in the United States were mailed a similarly constructed survey between July and December 2008. The surveys were approved by the institutional review boards of the 2 university-based facilities studied. All participants were informed that their survey responses would remain anonymous.

The surveys contained 60 questions requiring approximately 15 minutes to complete. Definitions for key terms (serious and minor error, near miss, adverse event, and medical error) were provided at the beginning of the questionnaire and at the bottom of each page. Respondents used a 4-point Likert scale (strongly agree, agree, disagree, strongly disagree) to respond to attitudinal questions.

The survey included questions regarding estimated error rates and barriers to and experience with error disclosure. Respondents were also asked questions exploring attitudes and behaviors related to reporting errors to the hospital, discussing errors with colleagues, and disclosing errors to patients. Additional questions included whether the pathologists were aware of an error reporting system for physicians within their hospital and what mechanisms they had used to report errors. Questions about error disclosure included the types of errors that should be disclosed, potential barriers to disclosure, and respondents’ personal experience with disclosing a serious or minor error. General attitudes about errors and patient safety were explored by assessing respondents’ level of agreement toward specific statements or items. Respondents were also asked questions exploring pathologists’ attitudes toward medical malpractice. Additional questions measuring participant demographics, practice experience, and environment were also included. A full copy of each survey is available at www.ajcp.com.

Statistical Analysis

Continuous variables such as age and estimated number of errors were summarized by using the mean, SD, and range. The remaining variables were tabulated by category, and percentages were reported. All complete data on each question were used. Attitudinal questions that used a 4-point Likert scale were reduced to binary responses (agree vs disagree) by combining “strongly agree” and “agree” vs “strongly disagree” and “disagree.” Responses using “somewhat” and “very” were combined in other questions of interest. Finally, several questions allowed respondents to choose multiple answers. Most of these, eg, the ones reflected in Table 2, did not allow respondents to explicitly choose none of the answers. Therefore, we assumed that lack of response meant that none of the answers applied.

Tests for differences between anatomic pathologists and laboratory medical directors were conducted on all questions.

Table 1
Study Definitions

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We used *t* tests for continuous responses and χ² tests of association for binary and categorical responses. The resulting *P* values were not adjusted for multiple comparisons.

All statistical analyses were performed by using Stata 2007 Statistical Software, release 10.0 (StataCorp, College Station, TX).

**Results**

The combined survey response rate was 51.0% (174/341; 43.5% of anatomic pathologists [113/260] and 75.3% [61/81] of laboratory medical directors). Five laboratory medical directors were excluded from subsequent analyses because they were not in the target subspecialty, decreasing the number of surveys analyzed to 56. Characteristics of the respondents are provided Table 4. Of the 113 participating anatomic pathologists, 69.9% were in private practice. All surveyed laboratory directors were affiliated with 1 of the 2 academic medical centers. Unless otherwise stated, the responses from anatomic pathologists and laboratory directors did not show statistically significant differences.

Of the respondents, 76.2% (125/164) agreed that “Medical errors are one of the most serious problems in health care.” Anatomic pathologists and clinical laboratory directors believed that errors occurred frequently, on average estimating that 3% of hospitalized patients would experience a serious error, 12% a minor error, and 15% a near miss. Respondents were split in their beliefs regarding the cause of medical errors: 55.2% (90/163) believed that they are due to failures of care delivery systems, not individuals, while 44.8% (73/163) disagreed.

The vast majority of respondents, 95.2%, reported having been involved with an error. Of the respondents, 43.6% reported involvement with a serious error, 69.1% with a minor error, and 77.6% with a near miss Table 5. The respondents were near unanimous in their belief that serious errors should be discussed with colleagues (95.2%), disclosed to patients (97.0%), and communicated to hospitals (94.6%). However, respondents’ beliefs varied as to which less harmful errors should be disclosed. Only 72.3% believed that minor errors should be disclosed to patients, and 76.0% believed minor
errors should be disclosed to hospital systems. Of the respondents, 60.5% believed that near misses should be revealed to hospitals, and only 20.1% thought that patients should be informed of near misses. Table 6.

Although the majority of respondents believed they should report errors of any type to their hospital or health care organization, 24.7% (41/166) of respondents did not know whether a formal error reporting system, such as an incident reporting or patient safety program, existed within their organization. Of anatomic pathologists, 28.2% (31/110) indicated that such a hospital reporting system was unavailable to them, as did 8.9% (5/56) of laboratory medical directors.

Of the respondents, 88.8% indicated that they had used at least 1 mechanism to report an error, including informal reporting to a supervisor, manager, or physician chief; however, anatomic pathologists and laboratory medical directors used different reporting methods (Table 2). Anatomic pathologists most commonly reported errors to risk management (59.3%). Laboratory medical directors most commonly used incident reports as a means of communicating error (85.7%). Only 47.8% of pathologists and laboratory medical directors believed that the current systems for reporting patient safety problems to the hospital were adequate. Even fewer respondents (26.9% of anatomic pathologists and 41.5% of laboratory medical directors; \( P = .003 \)) believed that the current systems for informing pathologists about errors that occur in their hospitals are adequate.

 Respondents agreed that errors should be discussed with colleagues, with 95.2% of respondents endorsing such conversations. All error types had reportedly been discussed with colleagues, with 98.2% of anatomic pathologists and 89.3% of laboratory medical directors having had these conversations. More respondents had informally discussed error at each level of severity with colleagues than had formally reported error to risk management or patient safety programs.

 Anatomic pathologists and laboratory medical directors perceived their risk of being named in a malpractice suit within the next year differently. Anatomic pathologists believed their risk of being sued to be 4.4%, with a range of 0% to 25%. In contrast, laboratory directors perceived less individual risk, answering that their risk within the next year of involvement with a lawsuit is 1.3% (range, 0%-10%; \( P = .0001 \)).

Only 16.2% of respondents reported disclosing a serious error and 5.5% a minor error directly to a patient. Of the respondents having disclosed serious pathology error directly to a patient, 88.0% (22/25) reported satisfaction with the results of the disclosure conversation; 91.7% (11/12) of respondents who reportedly disclosed minor pathology error to a patient reported satisfaction with the disclosure conversation.

Despite their support for the concept of disclosing errors to patients, many respondents acknowledged that a variety of barriers might decrease their willingness to discuss an error with a patient. The top 2 barriers were that patients might not be able to understand the error (49.7%) and that a physician might not be able to adequately explain the error to the patient (40.2%) (Table 3). A minority of physicians said they would be less likely to disclose error if they thought the patient was unaware of the error or would not want to know. Only 11.2% of respondents said that fear of malpractice litigation would affect their recommendations regarding disclosure of an error.

Although 88.6% of respondents indicated that they were somewhat or very interested in receiving general education or training on how to disclose errors to patients, only 21.7% reported having received such education or training. Of the respondents, 95.2% reported interest in receiving coaching from an error disclosure expert in case they were involved with a serious pathology error. With respect to emotional support after error, 75.8% of respondents believe that hospitals and health care organizations do not adequately support pathologists in coping with the stress associated with medical errors. Of the respondents, 79.4% expressed interest in access to counseling in case they were involved in a serious error.

Discussion

Although the vast majority of pathologists and laboratory medical directors have had experience with errors, relatively few have experience disclosing errors to their hospital systems.

Table 6
Attitudes Regarding Error Disclosure*

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<thead>
<tr>
<th>Statement</th>
<th>Anatomic Pathologists and Laboratory Medical Directors</th>
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<tr>
<td>Near misses should be disclosed to patients</td>
<td>34/169 (20.1)</td>
</tr>
<tr>
<td>Minor errors should be disclosed to patients</td>
<td>120/166 (72.3)</td>
</tr>
<tr>
<td>Serious errors should be disclosed to patients</td>
<td>162/167 (97.0)</td>
</tr>
<tr>
<td>Near misses should be reported to HMO</td>
<td>101/167 (60.5)</td>
</tr>
<tr>
<td>Minor errors should be reported to hospital/HMO</td>
<td>127/167 (76.0)</td>
</tr>
<tr>
<td>Serious errors should be reported to hospital/HMO</td>
<td>158/167 (94.6)</td>
</tr>
</tbody>
</table>

HMO, health maintenance organization.

* Data are given as number/total (percentage).
and fewer still, directly to patients. To move toward more full disclosure of pathology error to institutions and patients, it is important to understand factors that deter sharing error-related information. This study, which examines communication about error in a large sample of anatomic pathologists and laboratory medical directors, identified barriers to error disclosure that can be addressed to improve patient safety.

Anatomic pathologists believe that current error reporting systems are inadequate. Many respondents were unsure of the existence of an error reporting system within their sites of practice. Uncertainty regarding the functioning of the current system may, in part, explain the preference of anatomic pathologists for informal reporting behaviors, such as discussions with colleagues. Although laboratory medical directors seem to have more familiarity with existing formal reporting systems, they agree with their anatomic pathologist colleagues that current systems for reporting patient safety problems are inadequate. Inadequacies in error reporting systems can delay identification of preventable errors and impede efforts to improve patient safety. Redesign of hospital reporting systems to include features relevant to specialty practices like pathology and dissemination of information regarding system changes to improve patient safety would likely result in increased use of institutional error reporting systems. In addition, formal training of system users is needed, with targeting of educational programs for anatomic pathologists who are less likely to report error than their laboratory director colleagues working in academic institutions.

This study revealed that pathologists and laboratory medical directors are not comfortable with their communication skills in regard to disclosing error to patients. While pathologists endorse the concept of disclosing errors to affected patients, they also reported many barriers to full disclosure. One especially difficult issue related to disclosure of pathology errors is what role the pathologist or laboratory medical director should have in the disclosure process. Disclosure of pathology error to patients is complicated by the lack of an established relationship between pathologist and patient. Traditionally, error disclosure occurs through a treating physician, often without input from or reporting to the pathologist involved in the error. Although it makes sense for the disclosure to come from the physician who has the closest relationship with the patient, this approach also presents problems. When the pathologist is not present during the disclosure, it is not possible for the pathologist to know whether the disclosure was full or cautious and qualified; how the pathologist’s role in the error was explained to the patient; or whether the disclosure even occurred. Indeed, in our experience, pathologists rarely get feedback about how error disclosure was received by the affected patient, making it difficult to know whether the appropriate information about the event was conveyed to the patient.

There are several limitations to our study. The study surveyed a relatively small sample of pathologists and laboratory medical directors in only 2 geographic locations. Therefore, the findings may not be generally applicable, especially because regulatory environment and malpractice conditions vary between states and institutions. In addition, the laboratory director’s survey was distributed only to directors in academic institutions, and the answers may not be reflective of community patterns. Because the survey relies on self-reporting of error, it is not possible to confirm the actual number of errors reported or disclosed. Self-reporting can also introduce bias in that responses may reflect the perceived socially desirable behavior rather than true individual attitude. Respondents may feel pressure to report more positive attitudes toward disclosure than they hold, causing the survey to underestimate the challenges pathologists experience with reporting and disclosure.

The movement toward full transparency in health care is accelerating, and pathologists will be pressed to comply with established disclosure guidelines. To date, there has been little discussion and no guidance in pathology on appropriate standards for communication of pathology errors. Although communication regarding pathology error is difficult, failure to communicate effectively about error can undermine attempts to reduce error and enhance patient outcomes. If pathologists are to fulfill their professional obligation to identify and reduce errors, they will need to become more comfortable communicating about error and take an active role in the disclosure planning process. Pathologists should become familiar with the resources that exist at their sites of practice to help with response to error, including risk management procedures. Professional societies could help by creating guidelines for disclosure of pathology errors and programs to enhance pathologists’ disclosure skills. Such developments could help pathologists have a more integral role in meeting patients’ expectations for open communication following medical errors.

References