

EXHIBIT E

"B" Readers' Radiographic Interpretations in Asbestos Litigation: Is Something Rotten in the Courtroom?¹

Murray L. Janower, MD, FACR, Leonard Berlin, MD, FACR

Something is rotten in the State of Denmark.
Shakespeare, *Hamlet*, (1)

"Comparison of 'B' Reader's Interpretations of Chest Radiographs for Asbestos Related Changes," written by Gitlin, Cook, Linton, and Garrett-Mayer and published elsewhere in this issue of *Academic Radiology* (2), raises considerable concern as to whether interpretations of chest radiographs rendered by B-reader radiologists acting as expert witnesses and offered as testimony in asbestos-related litigation is non-partisan and clinically accurate. Well-researched and statistically analyzed, the article contains data that is as disquieting as it is startling.

Gitlin et al. obtained 492 chest radiographs interpreted as positive for pulmonary changes by B readers retained by plaintiffs' attorneys, and then had them reinterpreted by six consulting B-reader radiologists who had no knowledge of how the initial radiologists had interpreted the radiographs or even that the radiographs had been entered as evidence in asbestos-related litigation. The initial B readers—all of whom had been retained by plaintiffs' attorneys—found that 96% of the cases revealed parenchymal abnormalities. The six consulting B-reader radiologists reported that parenchymal abnormalities were present in only 4.5% of cases. A number of additional and rather dramatic discrepancies were uncovered. The authors calculated that the odds that an initial reader would rate film quality as "good" were 5.53 times the odds that a consultant reader would rate the same film as "good" quality. To the question, "Is the radiograph completely normal?" 38% of the consulting B readers an-

swered "yes," compared to none of the initial B readers. Gitlin et al. also found that to the question, "Are there any parenchymal abnormalities in the radiographs consistent with pneumoconiosis?" initial readers answered "yes" in 97% of their reports, whereas the consultants recorded "yes" in only 6.2%. Initial readers were also far more likely to conclude that a chest radiograph had pleural abnormalities than a consultant reader.

The impact on legal proceedings of the findings of Gitlin et al. is substantial. The administration of justice depends on expert witnesses whose duty it is to educate jurors and judges on matters not ordinarily known to lay people (3). In litigation involving medical issues, scrupulously honest physician-experts are essential to the determination of truth; indeed without them "justice would frequently be defeated" (4). Let us recall what the Code of Ethics of the American College of Radiology states about expert witnesses: In providing expert medical testimony, radiologists and radiation oncologists should exercise extreme caution to ensure that the testimony provided is non-partisan, scientifically correct, and clinically accurate (5).

The words of the American Medical Association's Code of Medical Ethics are similar: Medical witnesses should ... testify honestly and truthfully [and] must not become an advocate or partisan in the legal proceeding (6).

Do the radiographic interpretations rendered by the initial B readers and submitted as evidence described in the article by Gitlin et al. constitute testimony that is correct, accurate, and truthful? Are the many discrepancies that were present between the interpretations of the initial readers and those of the consulting readers the result of simple differences of opinion among professional colleagues, or do they represent opinions that are without foundation and devoid of truth? The distinction between these two extremes can be murky.

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¹ From Boston, Massachusetts, and Skokie, Illinois. Address correspondence to M.J. e-mail: janower@yahoo.com

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While certain abnormalities on chest radiographs are so clear-cut that there is almost unanimous agreement among interpreting radiologists as to their presence and significance, other pulmonary abnormalities may be sufficiently nondescript and ambiguous such that there is poor consensus among interpreting radiologists. It has been long recognized that radiologists do vary in their perception of many pulmonary findings and in their evaluation of the significance of these findings. Multitudes of studies published over the past half-century have shown up to a 30% variance in radiologic interpretations of the same chest radiographs (7). However, the fact is that none of these previously published studies have shown variations to the same extent as is shown in the article by Gitlin et al.

Notwithstanding the caveat that it may be difficult to distinguish between opinions based on truth from opinions resulting from ulterior motives, the article by Gitlin et al. is disturbing, for it raises the question of whether objectivity and truthfulness among certain B-reader radiologists have been supplanted by partisanship and distortion of or departure from the truth driven by financial gain. If the latter dynamic is correct, and we must admonish that we do not as yet know if it is, the negative ramifications are myriad. Our system of justice is predicated on truth-finding and the need for radiologists to serve as expert witnesses called upon to educate juries and judges in an honest and professional manner. The credibility and integrity of radiology experts are essential. If our credibility and integrity are compromised, and again, we must exercise caution by emphasizing the word *if*, then it is not only our legal system of justice that is imperiled, but also the very moral fabric of the radiology profession.

Asbestos litigation in the United States is no small matter. As the authors have pointed out, in recent years lawsuits on behalf of hundreds of thousands of workers alleging harm to their health from occupational exposure to asbestos particles have been filed against many companies that fabricated asbestos products. Lawsuits seeking billions of dollars in compensation are currently pending in federal and state courts and thus far more than 60 U.S. companies have sought voluntary bankruptcy to deal with

such claims. Postero-anterior chest radiographs are crucial pieces of evidence in such litigation, and accurate interpretations of their findings are major factors upon which final resolution of these lawsuits is based.

Metaphorically speaking, Gitlin et al. have sounded an alarm with regard to the accuracy of B readers in asbestos-related litigation. The alarm will undoubtedly reverberate, as it should, throughout the courtrooms of the nation, the offices of the Public Health Services National Institute for Occupational Safety and Health (NIOSH), the headquarters of the American College of Radiology, and radiologic facilities in every state. The alarm must be heard and heeded.

As it turned out, something was indeed rotten in the halls of Kronborg Castle in Elsinore, Denmark, where Shakespeare's *Hamlet* took place. It is incumbent upon the radiology community to find out whether something is, or is not, rotten in the courtrooms of this nation in the context of B-reader interpretations of chest radiographs in asbestos litigation. Notwithstanding actions that might be taken by the courts or government agencies, the radiologic community itself clearly has an obligation to conduct further investigations to determine whether the integrity of B-reader radiologists has indeed been breached, and if so, to repair the breach, implement measures to prevent it from happening again, and restore integrity to our noble and proud profession.

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