Developing a True Blind Review

HOW CAN LITIGATION DETERMINE IF A RADIOLOGIST’S FAILURE TO IDENTIFY AN ABNORMALITY IS NEGLIGENT?

Imaging interpretation has been described as a search for abnormalities. When the radiologist fails to detect an abnormality, this interpretive error is often referred to as a “miss.” If a patient suffers harm from the miss, perhaps related to a delayed diagnosis, it sometimes results in malpractice litigation. In such proceedings, the plaintiff pursues a simple argument: the abnormality is there, and the radiologist should have identified it. Both the law and medical science recognize, however, that not every miss constitutes negligence. Yet the legal system does not have a reliable, objective means to distinguish legitimately negligent misses from other errors.

Defining Medical Negligence

An imaging miss is negligent if the radiologist breached the standard of care in reading the subject image(s), which in most jurisdictions means that the radiologist failed to act as an ordinary or reasonable radiologist. Nevertheless, how can the legal system determine whether a reasonable radiologist should have detected the abnormality? If the abnormality is considered “obvious,” then a reasonable radiologist should identify it, and the failure to do so is negligent. Conversely, a radiologist’s inability to spot an extremely subtle abnormality is not unreasonable and does not breach the standard of care.

The question at the heart of most radiology miss lawsuits, therefore, is whether the missed abnormality is obvious or subtle. Typically, a jury would answer this question after weighing the evidence at trial, which provides a look into the minds of radiology experts.

In a typical lawsuit involving a missed abnormality, the plaintiff retains a radiology expert to testify that the overlooked abnormality is obvious and would be identified by any reasonable radiologist. Meanwhile, the defendant engages another radiology expert to state that the abnormality is subtle and would be missed by many reasonable radiologists. Thus, the jury must use only the opinions of competing experts to determine a verdict.

Unfortunately, the defendant radiologist is at an inherent disadvantage in this process. In the vast majority of cases, the expert opinions offered at trial are profoundly influenced by hindsight and biased by patient outcome. In fact, regardless of diagnostic ability, the plaintiff’s expert will likely know something was missed simply because the patient image(s) are involved in litigation.

Solving the Problem

Inside or outside the courtroom, many individuals use a level of difficulty to judge any performance. For example, an error in baseball is a fitting illustration of this concept. When an infielder fails to successfully field a ground ball, the official scorer must decide whether the failure constitutes an error. This determination depends on the difficulty of the play. Was it a play most infielders would make with ordinary effort? The official scorer is forced to make a subjective judgment. But because it is unfeasible to replicate the play exactly, it would be impossible to test scientifically whether a typical player could have made the play with ordinary effort.

Similarly, because missed cases are frequently determined by only the issue of how a reasonable radiologist would interpret and report high-quality images viewed in a typical radiology setting, it is possible to ask other radiologists to interpret the same images. Further, these radiologists can read these images without bias if they do so as a part of their daily workload and without knowing the patient outcome or that the images are involved in litigation. By obtaining an appropriate number of unbiased interpretations, a scientific basis can be used to answer the question surrounding a missed abnormality, achieving a true blind review.

We performed an informal preliminary study that demonstrated not only that a blind review of cases involved in litigation is plausible but it could also be accomplished fairly easily. Ideally, we envision the review involving a panel of radiologists who would express a willingness to participate in advance. The blind review would consist of electronic radiographic images with fictional identifiers to be pushed to the participants as part of their normal cases. Although these reviews would add slightly to participants’ workloads, it would provide fellow radiologists with an unbiased and fair review should they face an accusation of negligence.

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ENDNOTES

2. Ibid at 521.