



# Medical malpractice: Simplifying the complex

## A five-step visual strategy for exposing surgical malpractice

By TYLER KOMARNYCKY

More than 10 percent of patients are injured during the course of their medical care, according to a new study published in *The BMJ*, an international medical journal ([www.bmj.com](http://www.bmj.com)). Half of those injuries are preventable, and among those preventable errors, 12 percent result in permanent disability or death. However, 20 years of experience tells us that physicians win 80-to-90 percent of jury trials, often due to evidence of negligence that appears weak or overly complex. The defense only wins about 50 percent of trials when there is strong visual evidence of medical negligence.

When you need to prove that your client's injury was the result of a preventable medical error, you need a visual strategy that simplifies your complex evidence, reinforces your expert's testimony, and engages your audience with decisive clarity.

One of the most challenging aspects to any surgical malpractice case is the complexity. Simplifying that complexity and

identifying the most important themes to your case is the key to telling an effective story that educates your audience on what happened and exposes clear, undeniable negligence on behalf of the defendant.

When organizing your visuals for a surgical malpractice case, it's easy to get bogged down with all the complicated details you think you must convey. However, it's important to remember that you only need to establish the critical chapters that will allow the defendant's negligence to speak for itself – *res ipsa loquitur*.

How do you prove that a doctor injured your client during surgery? By organizing your case into five steps that lay the foundation for a visual strategy that most effectively tells your client's story.

### **Establish the normal anatomy**

The first step to visualizing any surgical malpractice case is to establish the normal anatomy of the area in question, and in some instances, demonstrate how it functions. Establishing the normal anatomy provides your audience with the prerequisite



knowledge they need to understand the initial disease/injury that prompted your client's surgery in the first place. It also anchors an important prequel to the chapters that follow, enabling you to more dynamically compare and contrast the situation before and after a surgery.

Illustrations are effective when a static image can summarize the specific locations and functions of injuries and surgery sites. Surgical errors involving the skeletal anatomy or the failed removal of fixed organs are examples where illustration could suffice in establishing normal anatomy. Your experts can reinforce these visuals with heightened context for how these areas function, and if needed, you can break up your illustration into smaller chapters that walk jurors through a more complex process.

Animation might be the better option when you're dealing with a case involving anatomy that fluctuates and changes with more volatility, or with a bodily system where its disruption can cause chain reactions elsewhere. For example, animation might be more effective than illustration if you need to show how the circulatory system was disrupted by the cutting of a blood vessel or the failure of a heart surgery. If you need to show how your client's eyesight was ruined by a surgical mishap, animation will more effectively demonstrate how the eye is supposed to interpret light, versus how it functioned after an operation.

We worked on illustrating a case where the plaintiff suffered a sigmoid volvulus, in which the colon twists around itself. The entire affected area needed to be completely removed (emphasis on "entire" and "completely"). Before the audience could understand what a volvulus is or why it would need to be completely removed, they first needed to understand the normal anatomy and function of the colon. The illustration helped the audience conclude why the complete removal of the sigmoid colon was imperative, and ultimately botched by the defendant surgeon.

### Introduce the pre-op condition

Once you've established the normal anatomy, the next step is to introduce the pre-op injury or condition that prompted the need for surgery on this area in the first place.

Laying the foundation for why surgery was necessary (coupled with the prerequisite knowledge of the normal anatomy) enables your audience to better understand what the surgery was supposed to address and why. It provides a snapshot visual to compare before-and-after the surgery, and later to contrast the correct versus the incorrect way the procedure should have been performed.

The most credible way to show your client's pre-op condition is likely through his or her radiography: X-rays, MRIs, or CT scans. You can reinforce this evidence by adding realistic color to the films, which focuses attention on what's most important and maximizes context. If radiographic films are unavailable, illustration or animation can substitute to fill these gaps accurately and comprehensively.

Illustration can be effective when you don't have radiographic films pertaining to the area where malpractice (or the need for surgery) is evident, or when your story can't be fully conveyed through an ambiguous black-and-white scan. For example, the interconnecting network of blood vessels through a plaintiff's arm cannot be depicted through traditional radiography. But illustrating the pathways of these blood vessels enables you to expose how disruption to this network resulted in an unnecessary amputation.

Animation adds significant value when complexity is a major factor in your case. When the focal point of your client's damages involves a complicated anatomical system that was disrupted, watching an animation of how this system was operating before surgery will enable your audience to draw a clearer connection to the post-op aftermath that destroyed it. When a surgical error causes a chain of events that result in injury elsewhere, animation

is also an effective tool for summarizing this sequence of events.

When the plaintiff in our sigmoid volvulus case underwent surgery, the doctor failed to remove the entire affected area. After we established the normal anatomy and then introduced what this condition looked like, we were able to more effectively show how the surgery failed to address this condition, demonstrate how it resulted in medical catastrophe, and compare the incorrect procedure to the way it should have been performed.

Once you've introduced your audience to the injury or condition that prompted surgery, the next step is to show the surgical negligence that has prompted your lawsuit.

You will need to work closely with your experts to validate the authenticity of visuals for this chapter. Being able to show exactly what went wrong enables you to more effectively compare the defendant's improper procedure to what should have happened correctly. This draws a clearer connection between the procedure and how it specifically affected your client. It also magnifies gross negligence by providing a stark contrast between what would have been the proper procedure compared to the defendant's improper outcome.

### The timeline of events

A visual timeline of events is an important visual for any case, beyond just medical malpractice. Make sure your timeline is not overloaded with data, but instead focuses on the most important points of proving your case. In some instances, you may need your timeline to build toward a climactic "point of no return" in which your client's damages were inevitable. Your timeline can later be visualized into a more graphical component, but first, it's important to establish what you need to focus on demonstrating. Less is almost always more when it comes to timelines and, regardless of content, your delivery of the information will be a key factor in your success.



Another way to emphasize negligence is to visually stack up the risks involved in a procedure that went ignored by the defendant doctor. For example, if several obvious risks point to the conclusion that a mother would very likely require a C-section, visually stacking up these red flags over time will paint a more brutal picture of the risk and the lack of preparation by the defendant.

If you can show that your client's surgery carried substantial risk that was unambiguously disregarded by the defendant, you can emphasize the recklessness through which your client's surgery was mishandled. "Simple" charts, tables, and checkbox type exhibits used during direct or cross examination reinforce these points effectively.

When you need to bring specific points of negligence to life for your audience to see what went wrong, illustration can be an effective option for demonstrating the specific procedural steps that were performed incorrectly. This is most effective when the focal point of negligence is on one primary error, such as the failed removal of an organ or the improper severing of a bile duct.

Illustration can also expose several surgical mishaps throughout a botched procedure, which is especially powerful when comparing right versus wrong procedures in a later chapter.

### **Animation may be effective**

Animation adds significant clarity when you need to show how a surgical error resulted in a complex anatomical sequence of events that caused damage elsewhere in the body. For example, how might the injection of a steroid in the shoulder cause disrupted blood flow to the legs? Animation is also powerful when you need to emphasize a particularly disturbing injury that occurred during surgery, such as the surgical perforation of an intestinal organ.

The defendant doctor in the sigmoid volvulus case not only failed to remove the patient's entire sigmoid colon; he also performed a grossly improper procedure

that included two incisions in the colon instead of one, which characterized a clear lack of competence in understanding how the surgery was supposed to be performed.

It should be noted, you may be extremely limited by your experts on this issue because they cannot always validate exactly how a procedure was performed. What the defendant is or is not admitting may also come into play in certain venues. However, you don't always need to illustrate this chapter verbatim. Simply being able to show the pre- and post-op conditions is usually enough to allow your evidence to speak for itself.

### **Illustrating the post-op outcome**

The focal point of your surgical malpractice case will usually be the injuries your client suffered as a result of the defendant's negligence.

You should have the evidence to substantiate your damage claims in the form of expert reports, which are often based, in large part, on post-op radiographic films. You should also have strategic visuals to reinforce this evidence with accurately realistic validity that your audience will clearly understand. Magnifying the damage your client suffered as a result of surgical negligence is the most critical aspect of your case because it justifies the claims you are seeking for your client.

Colorized radiography is often the simplest, most effective way to highlight evidence of your client's damages, but this evidence may not always be clear or available. There are many other visual methods to emphasize the abhorrent outcome of a surgical malpractice case.

Illustration enables you to incorporate additional symptoms caused by the outcome, such as paralysis or an amputation. Animation puts in motion the anatomical disruption caused by surgical negligence, such as how an eye's perception of light was directly impacted by a dangerous chemical solution.

When your client's injury requires many follow-up treatments and medications, a

treatment calendar exhibit will help you visualize the immediate uptick in medical needs your client would experience following a botched procedure. Create a timeline that outlines the number of times your client needed to visit the doctor, undergo surgery, or take medication, and the visual will speak for itself when your client's medical needs dramatically increased.

If your client's brain was damaged and a neuropsychological evaluation is indicated, this can also be visualized. Outline your expert's neuropsych exam and correlate it visually to the areas that were impacted during surgery (or as a result of a delayed diagnosis or inaction). Radiographic films can also prove useful in substantiating these areas of damage, but sometimes the neuropsychological evaluation is all you have available.

In the case of the woman whose sigmoid colon wasn't fully removed, CT scans showed prevalent amounts of fecal fluid that leaked from the surgery site. While the black-and-white films looked somewhat ambiguous, adding color to these CT scans and illustrating where this leakage occurred within the abdomen helped jurors understand and recognize the grotesque impact this botched surgery caused for the plaintiff.

### **Right vs. wrong**

Once you've established the normal anatomy, introduced what prompted surgery, demonstrated how the surgery was botched, and illustrated the injuries your client suffered as a result, you must conclude how your client's injury could have been avoided had defendants adhered to the standard of care.

Comparing right-versus-wrong enables you to expose obvious mistakes and egregious errors, contrasted with the proper steps toward completing the procedure correctly. It's important to focus your visual comparison on the stages of the surgery where deviations were made and emphasize points of clear negligence. You don't need to walk jurors through every detail of the surgery



(and you likely shouldn't try to); you only need to aim your audience's attention on the steps that contributed to your client's injury.

The simplest way to compare right-versus-wrong is through what we deem a pathways chart. Map out the defendant's improper decisions that resulted in your client's injurious outcome alongside a path that simultaneously charts the correct decisions that would have resulted in a successful outcome. Make something otherwise very complex *very simple*. This will not only enable your audience to understand the individual deviations, but it also paints a comparison to differentiate the two wildly different conclusions.

You might consider taking your right-versus-wrong pathways chart to the next level through illustration or animation, which would provide a more detailed snapshot of each error or miscalculation. This is especially useful when the specific points of negligence are difficult to explain in words. For example, comparing the right-versus-wrong way to

restore blood flow might require a visual for your audience to fully comprehend what went wrong.

In the case of the woman whose sigmoid colon was not fully removed, an illustrated pathways chart compared the right way to perform the procedure to the wrong way in which the defendant performed it. Because it was important to specify exactly what the defendant did wrong, an illustrated pathways chart was the most effective option because it provided maximum context along with two widely different outcomes for the audience to compare.

### Conclusion

Your visual strategy should simplify the complexity surrounding your surgical malpractice case by enabling your audience to see and observe issues on their own. It should reinforce the most important themes necessary to proving negligence. And it should allow that surgical negligence to speak for itself.

The proper combination of visuals for proving surgical malpractice will be unique for every case. Your visual strategy will depend on a wide range of factors, including what the surgical error was, how your client was impacted, what evidence you have available, and what the defendant doctor is willing to admit.

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