The Fog of War

I just read a book about Vietnam in 1967, entitled *They Walk into Sunlight*. In this book the authors describe battles strategy and military and expressions such as “the fog of war.” Indeed, there is an American movie out now called the “Fog of War,” which is about former Secretary of Defense (George McNamara) and his recollections of Vietnam. “Fog of battle” is military expression that is meant to describe what happens during a fierce firefight or battle in any war. The book states that there is so much noise and confusion, even in a well-planned assault, that sometimes it is difficult to piece together what really happened, and it is difficult for the participants to really describe what happened to them. The book is fascinating. It also made me think about intervention and interventional procedures.

I do not mean for a second to compare interventional procedures to battles in wars. Obviously, they do not really compare; however, I wonder sometimes during complicated procedures whether there is a “fog of intervention.” This may sound unpleasant or even negative when talking about intervention, but at times I certainly wonder about it. I think that most procedures are thought about ahead of time and, one hopes, are carefully planned. In our group we try to review the imaging a day ahead of time and certainly before the procedure. However, I am not sure in every case that we go through the procedure step by step with the performing fellow or resident.

Generally, we review the technique, whether it is abscess drainage, biliary drainage, cholecystostomy, or whatever, but sometimes when the procedures are being performed, unexpected events happen. This is when I think the fog of intervention can occur. For example, how many times has one started to drain an abscess and then inadvertently noted that the catheter went through the small bowel or transgressed the pleura, or the collection was completely missed? How many times does one perform a routine angiogram and create a dissection prior to angioplasty or stent placement? How many times has a biliary drainage turned into a complete shambles, with hemobilia and inadequate opacification of the duct as well as no drainage? It is hoped that these events do not occur very often, but they can happen. Things become difficult, tense, and “foggy,” if

you will. This may be no different from what happens in surgery when things go wrong. It is easy to do things when everything goes perfectly and smoothly. What is difficult, and requires most of our concentration skill, education, and experience, is when things go badly.

Maybe it is a far-fetched to compare the fog of war with the fog of intervention, but I think it sometimes fits. Many times during an interventional procedure unforeseen things happen. I can say that anybody who has done interventional radiology has been in a situation where the case seems easy at first glance—a “chip shot,” if you will. Then something happens. How do we prepare for that “something” that happens and how do we deal with it? Frankly, almost anybody with minimal training can deal with an easy case that goes well. Our goal in teaching procedures is to make the interventional fellows able to handle the problem case, to think ahead, and to know ahead of time what to do when things go wrong.

As always, sport analogies come to the forefront when I think of occurrences in intervention. Even if you are not a football fan, probably many of you know about what happened in the Super Bowl this year or watched the New England Patriots this season. Of course, I am not objective because I live in Boston, and I am an over-the-edge Patriots fan. However, throughout the season, the coaches of the Patriots were able to overcome small glitches or little adversities through planning, practice, and preparation. Those who follow professional football should remember the Patriots taking a safety late in the game against Denver so they could have a chance to get the ball back and score a touchdown. Professional football games are chaotic; things change every 10 minutes. The Patriots were prepared for all possible problems during the game. There was no “fog of football” because they were prepared.

It is impossible to know exactly how you will react when things go wrong, but that is what training is for—to prevent this so-called fog. Preparations, preplanning, and thinking ahead will help fight this fog. For example, I recall a very difficult biliary drainage in which it seemed almost impossible to get into the ducts no matter how hard we tried. The ducts were not that dilated, and we

had been struggling for quite a long time. Finally, we were able to negotiate a guidewire into the ducts and everybody was somewhat relieved. I was holding the guidewire, and as I turned to get a catheter to insert over the guidewire, the stickiness of bile and blood on my glove caused me to pull the guidewire out of the duct. Needless to say, I was incredibly upset. We had been struggling several hours in a very difficult biliary drainage. There were already several guidewires and catheters that had fallen or been thrown on the floor for one reason or another. The patient was probably uncomfortable, and the nurses and I were concerned about bleeding and sepsis. This was not a completely chaotic and panicky situation but there was tension in the room, and we were worried about the patient. However, the confusion, the drama, the uncertainty, the tension, the difficult procedure, and the seemingly minor error in judgment led to what turned out to be a very significant event. Anybody who has done biliary drainages knows that once you inadvertently dislodge the catheter or guidewire in a duct system you have already entered, it can be very difficult to get back in, particularly if the duct was minimally dilated or not dilated to begin with.

This episode taught me a lot and actually made me calmer in the future. I often talk to the residents and

fellows and reiterate the mantra of “never trust anybody who is holding a guidewire, including yourself.” That is a little hyperbolic, but the point is that one has to be extremely careful, particularly when things are difficult or going badly. You can translate this experience to any kind of procedure, whether it is a difficult guidewire probing for embolization or another procedure, but the point remains the same. Preparation combined with experience, planning, and thinking ahead can prevent this fog.

The Patriots won the football game. Needless to say, the coach was still involved in the game when the Patriots were ahead with 4 seconds left. He was still gathering his troops together and getting them to think about what was happening.

There is always a potential fog when things are going badly, and things can always happen that even the most thorough of us cannot predict, but all we can do is minimize the potential chances for these problems to happen—to prevent the fog of intervention. We can accomplish this with the foresight, thinking, education, common sense, practice, and all of the things discussed above.

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