Tools, Techniques, and Cats

There is more than one way to skin a cat.

I've always liked this adage. I really don't like cats. Although the origins of the proverb escape me, the point is almost universally understood and particularly applicable to interventional radiology. If you ask a room of interventional radiologists the best way to approach a problem, you're apt to get a hundred different answers. And some of them will actually work, too. I think most of us initially model both our thinking and techniques after our teachers. With experience, methods are modified or sometimes even abandoned altogether. Infrequently, we encounter a particularly painful complication or lawsuit and practice "reactive" medicine. Sometimes we read about a new method or attend a teaching course and adopt it into our practice. And occasionally, à la Sven Sel-dinger, we figure out a better way to do things. I particularly like this aspect of interventional radiology although I'm still waiting for an epiphany like the Seldinger technique. I'm not holding my breath.

Procedures become familiar roads, often traveled. In this metaphor, it's not the journey but the destination that is important. Not everyone takes the same path but hopefully most end up in the same place. In general, I encourage my fellows to learn different techniques used by their different attending physicians to ultimately employ the ones that work best for them upon completion of training. (When discussing this with them, I stress the words *upon completion*). During training, most attending physicians approach their trainees in the same way my father did when I was a teenager: "It's my way or the highway." Frequently, residents and fellows are frustrated by the particular idiosyncrasies of the different attending physicians in our program. I can't count the number of times I've heard, "Dr. So-and-So does it this way, why do you do it that way?!" My usual reply is, "Because my way is better."

An additional fact also bears consideration. Most of us already recognize the flaws in our techniques and can usually take the appropriate steps to avoid or fix predicaments that arise—none of us likes to be in

unfamiliar territory, especially when it comes to complications.

Occasionally, differences in technique will lead to heated discussion about which is "superior." For example, one of my colleagues uses a conventional double-stick technique for percutaneous nephrostomy. I like a single-stick approach. He talks about Max Brodel and his avascular zone in the kidney and I blather on about speed, cost, and practicality. Our ongoing debate led to a retrospective study designed to settle the issue once and for all. As I'm writing about this in my editorial, you can guess what the results showed. Even our peer-reviewed publication failed to convince him; he continues using his approach to this day. I often have medical students "shadow" me on my clinical days. Once, my colleague was struggling with a difficult percutaneous nephrostomy procedure using his "double-stick" method. For whatever reason, on that day, it was more like the "quadruple-stick" technique as he had four Chiba needles in this particular patient. The student who had observed me do the same procedure the day before using a "single-stick" approach had no idea what was happening (in retrospect, I'm not sure I did either). With a confused look on his face, he asked why my partner had "all those needles" in the kidney. He looked even more bewildered when I replied, "He's reducing the risk of bleeding."

I am frequently amused by how often someone will convince themselves that they are the first to create a new technique that has been known for years (I've been guilty of this myself). Rarely, technical innovations will be submitted to a journal, slip through the review process, and be reported as a new technique only to serve as fodder for Letters to the Editor. I wish I had a dollar for every time I thought I developed a new technique only to find out it had been originally reported when I was in grade school.

Sometimes, techniques that have been labeled "failures" are recycled with advances in technology. Embolization for lower gastrointestinal hemorrhage was first attempted while most of our current fellows were in diapers. At the time of its inception, the concept

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was straightforward; unfortunately, the tools to bring the concept to fruition were not yet available. For years, colonic embolization was considered taboo. Today, it is the therapy of choice for refractory bleeding in many hospitals. Atherectomy was all but dead and lo and behold, along comes a new device and here we go again (although now it's termed "plaque excision" rather than "atherectomy"). My dad practiced radiology for more than 30 years. He once told me that every 10 years or so, a new generation of researchers comes along and repeats the same things that were done a few years earlier. I guess everything moves in cycles to some degree or another. Then again, sometimes I cynically wonder if anyone has an original idea these days.

I think most of us have pretty strong feelings on how and why we do things, me included. I recently read a technical innovation on a procedure I've performed hundreds of times. In my mind, the new method was

akin to using a compound miter saw to cut a toothpick in half. The original procedure was relatively simple, straightforward to perform, and fast. The "innovation" increased the time to perform the procedure, required two different imaging modalities instead of one, and provided no measurable improvement in results compared with published series. In a strict sense, the description was new so I guess it did meet the definition of "innovation" but in my mind, any reportable innovation should somehow be an improvement on the existing state of the art. As far as I was concerned, this was clearly a step in the opposite direction. I wrote a letter to the editor of the journal stating my concerns. He replied, "There is more than one way to skin a cat." Touché.

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