Opinion

What? No Triskaidekaphobia? Then What About Surgical Rituals?

In the summertime, lots of small talk in big city elevators is voiced by tourists from places that don't have tall buildings, "Look honey, there is no 13th floor in this hotel." Acting on a whim, I discovered that the following airlines do not have a row 13: Air France, Iberia, Ryanair, AirTran, Continental, Air New Zealand, Lufthansa. Spokespeople for these companies claim it is in deference to people with a fear of flying.

I must confess that I don't intentionally walk under ladders (stuff tends to drop off them) and I look around furtively when a black cat crosses my path (to see what was chasing it), but I don't allow myself to consider myself superstitious, at least where bad consequences are said to follow the transgression.

I admit it is an entirely different matter when it comes to good consequences that are reputed to follow superstitious behavior. My wife and I are convinced that if we stop watching the hometown team on television while they have a lead, they will win instead of squandering the lead as they would otherwise. (This must occur by a reversal of information flow through the TV cable.) But it isn't just us. We have friends who wear their unwashed lucky jerseys to games in the belief that, smelly as these garments have become, this carefully aged fan apparel will help sweep the team to victory. The players themselves are even worse:

no shaving until the play-offs are over, nobody else can use my lucky bat, if I scratch and spit in exactly the correct order every time . . .

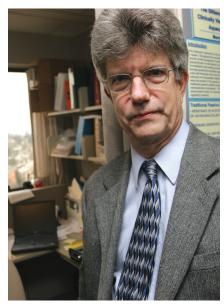
It turns out that such superstitions may actually have some positive effect on performance. Lysann Damisch and colleagues from the University of Cologne found that activating goodluck-related superstitions improved performance in golfing, motor dexterity, memory and anagram games. This seemed to be mediated by changes in subjects' perceived self-efficacy, boosting their confidence and hence performance.

Hmm, I wonder if this applies to ophthalmic surgery, as well.

A positive superstition is supposed to improve a future outcome. Since better outcomes are a universal goal, the superstitious behavior needs to be invoked every time, lest failure be the result. It isn't too much of a stretch to see the parallel between superstition and surgical maneuvers that we do each and every time we perform a procedure. When asked why, what do we answer? "It works when I do it that way." "Once, I did it differently, and it didn't work." "I was trained to do it this way." In some cases, the surgical maneuver falls into the category of surgical ritual: something that we do simply because we're afraid not to.

So how do we reconcile these natural tendencies as surgeons with the trend toward evidence-based medicine? Obviously, we can't do a surgical trial about every little surgical maneuver. On the other hand, we can certainly do a lot better in our quest to collect surgical evidence than we have. For example, the World Glaucoma Association has published guidelines on the appropriate design and reporting of glaucoma surgical trials. Several subspecialty societies have established clinical research networks to assist in multicenter trials as well. We should embrace these efforts, or forever be mired in surgical superstition.

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