

Start Your Engines

Steven P. Davison, DDS, MD
Jacob Nieb

In surgery, to underscore safety processes, we love to make comparisons with other industries like flying. Recently, I found myself making a similar comparison to car racing. I was privileged to spend a weekend in a race car run by a professional race team. This crew ran an incredibly well-oiled machine, not only literally but also metaphorically. They raced at 24 Hours of Daytona, keeping a car and driver on the track continually for an entire day and night.

As this was such a novel experience, I was attuned to every new aspect of the process and how it equated to our profession. The car driver and surgeon are easy to compare, the car being the best analogy for the patient and the pit crew serving as an operating room team. There is a track director who runs the track, just as the charge nurse runs the operating room board. The crew chief in many ways functions like the anesthesiologist, keeping the patient running. Mechanics prep the car as does the scrub or circulator; tire and gas men provide the supplies and tools to win the race.

Their obsession with repetitive processes and the culture of safety were familiar. The checks and balances prior to ignition are reminiscent of the operating room. If you consider that the goal of racing is to win, then you must drive as fast as possible while still staying on the track with the car intact. You have to finish to win. In surgery, we are driving the patient safely to the finish line in his or her race—you get the analogy.

It wasn't until I was back in the operating room that my romantic view of it all began to disintegrate. At the race track, they have a timeout called a "driver's meeting." It is done prior to getting in the car, so plans can be made and safely reviewed by everyone well before the race, in time to make a difference. All the technical checks are done before the day

begins, and no one asks you to sign off on anything as the green flag is dropped or after the checkered finish. The most acute and frankly sobering difference was that despite the hectic nature of racing, changing tires, gas, seat restraints, etc., it all began to slow down until the start button was pushed. The noise, fuss, and mess all smoothed out, culminating in the last reassuring "safe and smart" and fist bump with the crew chief before rolling onto the grid.

Now, back in the operating room—by contrast, the confusion just intensifies. The timeout, irritations, and conflicts all ascend while preparing the patient until they crescendo right before I'm supposed to cut. If I'm the driver in both cases and the goal is to finish the race, I mean case, as fast and safely as possible while preserving the car, then what about the driver's psyche? Never in the last 3 decades in the operating room have I ever experienced so many distractions to my view of "safe and smart," nor felt so little regard for the surgeon's state of mind before he makes the first cut. God forbid any of my crew consider how stressful it is to pull onto the track in the passenger seat. At the wheel, a resident racer full of an inflated sense of raw talent, then go the first 3 laps without grabbing the steering wheel.

Next, when you went out on the track, you knew the crew was there for you. You weren't about to get 3 laps in and have a new voice over the car radio letting you know the pit crew just went on their lunch break. If a race team can do this for up to 24 hours, how can we not sustain a consistent "race team" for a 2-hour case?

The driver was expected to drive, not run the garage. With an increase in operating room technology, when was the last time you had a team who could actually fix technical issues without disrupting the case? I don't order any equipment I can't troubleshoot intraoperatively myself. I have even had to change smart phones just so the circulator can answer my patient calls consistently.

When I was racing, all I was focused on was speed, turn apexes, threshold braking, and consistency. In the operating room, I find I am constantly

*From the DAVinci Plastic Surgery, Washington, D.C.
Copyright © 2015 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons. All rights reserved. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially.
Plast Reconstr Surg Glob Open 2015;3:e498; doi:10.1097/GOX.0000000000000434; Published online 27 August 2015.*

Disclosure: The authors have no financial interest to declare in relation to the content of this article.

being distracted by the total disregard to the fact that the patient can crash at any time. Worse yet is the general oblivion to the impact that enforced processes, check lists, and obstructions have on the surgeon's psychological state, who is trying to run the best race possible. Then, when we get done, having won the surgical 24 Hours at Daytona—say, a bilateral deep inferior epigastric perforators flap—I have to worry that someone on my team is

going to write me up as I was tense and irritated because they lost a tire or ran out of gas half way round the track.

When did we lose the race before it even began?

Steven P. Davison, DDS, MD

DAVinci Plastic Surgery

3301 New Mexico Avenue, NW

Washington, DC 20016

clinical@davinciplastic.com