

# Lessons in Life

## As Taught by the Cath Lab

There is no greater teacher of life than the practice of medicine but none greater than the place where life and death are often most precariously balanced. Having only been in the cardiac catheterization laboratory for a few months as a general cardiology fellow, I have already been taught a lot. These lessons resonate far beyond the opaque, windowless confines of the laboratory and apply to us as physicians and human beings regardless of occupation.

The catheterization laboratory has taught me that everything we do has consequences. In the laboratory, 1 errant movement, 1 lapse of concentration, 1 hint of frustration or fatigue can weigh one down like a lifetime of lead. Recently, I briefly advanced an 0.035-inch guidewire into a coronary artery rather than the safe embrace of the sinuses of Valsalva. Although no damage was done, because I rapidly pulled back the wire, those were some of the longest seconds of my life. The attending rightly took over the procedure immediately. The experienced technician standing next to me whispered, "It's okay."

Not all consequences we witness are adverse. In fact, the catheterization laboratory is a reminder of what we physicians can achieve for patients in their darkest hour of need. I was a resident in the cardiac intensive care unit when a patient arrived in the emergency department after a cardiac arrest. She had ST-segment elevations so tall, they resembled the waves painted by Hokusai. Connected to a breathing machine, with an intra-aortic balloon pump keeping her from cardiovascular collapse, an interventional attending relieved her left anterior descending artery of the grim thrombus lodged in its neck. The woman did not live long afterward, but long enough for her son, a Marine serving in Afghanistan, to return for a final goodbye.

The catheterization laboratory has also taught me the importance of awareness. "The cath laboratory is like a sea of adrenaline," one of my cath laboratory attendings, Mitch Krucoff, told me the first time I was about to start a case with him. My job, he told me, was to use Zen principles and master the sea, transforming it into a "still and rippleless pond," such that I could instantly detect any errant aberration, any random wrinkle: Is the pressure tracing damped? Is the O<sub>2</sub> saturation dropping? Are those ST elevations rising in V5? Is the C-arm about to smack the patient in the face? I learned that I had to absorb all these things while at the same time devoting the greatest amount of concentration I could muster to the larger task at hand. This awareness also extends to the person performing the procedure with me. "Four hands, one mind," is what Dr Krucoff has taught for 30 years. During most of my training, I have been tacitly accelerated under the benign guise of efficiency: present patients faster, write notes faster, and scroll through diagnostic studies faster. The catheterization laboratory faculty has taught me to slow down. "Slow is smooth. Smooth is fast," says David F. Kong, another one of my attendings, a quote attributed to Colonel John Dean "Jeff" Cooper, a soldier, master of small arms, and prolific writer.

The third great lesson that the catheterization laboratory taught me was about the importance of forgiveness. I was performing a diagnostic left heart cath, when

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**Key Words:** cardiac catheterization  
■ cardiology fellowship  
■ humanities

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I failed to get radial access. Although the rest of the case went smoothly, Dr Krucoff sat me down after the procedure. He had noticed my slumped shoulders. I had to learn to forgive myself, he told me, for few begin their training in the catheterization laboratory with any notable preexisting skills.

A lot of things need to go right in one's life to be a fellow in a cardiology program. For most, this means having good grades in high school and college, struggling to get admitted to medical school, and working one's way through a challenging residency before matching into cardiology, still one of the most competitive subspecialties in medicine. People who reach the catheterization laboratory after this long journey are not used to failing, struggling, or not knowing, and, therefore, they are not used to forgiving themselves. Nothing reminded me of trying to cannulate an anomalous coronary ostium than when I was struggling to change my baby daughter's diaper without my wife lending a helping hand.

I needed to forgive myself, I was told, so that I never lose awareness, for losing awareness risks dire consequence in the cath laboratory. Mastery of these lessons, however, leads to some meaningful encounters. Despite only having just started to experience the laboratory, I have developed my own rituals. At the end of every case, I go up to a patient, give them a thumbs up, telling them they did a great job. "It's a difficult procedure to get through, but you did really well," I

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usually say. One patient, though, replied, "No, *you* did a good job."

The transparency of the laboratory is its most humbling aspect. Every wiggle, every movement is there for all to see. It is one of the few places where we cannot veil our thoughts with jargon. Far from distancing us from our colleagues and our patients, it is a place where everyone truly undertakes a shared journey, for better, or for worse.

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## ACKNOWLEDGMENTS

I would like to thank the faculty and staff in the cardiac catheterization laboratories at Duke University Medical Center and the Durham VA Medical Center, both in Durham, NC, for their tireless dedication to the fellows.

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## DISCLOSURES

None.

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## FOOTNOTES

*Circulation* is available at <http://circ.ahajournals.org>.

**Lessons in Life: As Taught by the Cath Lab**  
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*Circulation*. 2016;134:1125-1126

doi: 10.1161/CIRCULATIONAHA.116.024391

*Circulation* is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231

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Print ISSN: 0009-7322. Online ISSN: 1524-4539

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World Wide Web at:

<http://circ.ahajournals.org/content/134/16/1125>

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