Adverse Surgical Events: Effects on the Surgeon

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Every busy surgeon experiences adverse events during his/her surgical career. When they occur, attention has been directed primarily toward the affected patient. While this is appropriate, and every attempt should be made to minimize patient harm and achieve the best possible outcome expeditiously, the effects of adverse intraoperative adverse events (iAEs) upon the surgeon have not received as much discussion as they deserve. Recently, resident and physician wellness, burnout, and other similar concerns have received increasing attention. Burnout and depression associated with electronic medical records have been debated widely, and the increasing problem of physician suicide has led to greater sensitivity and resources particularly in graduate medical training institutions. However, the effects of iAEs on the physician have not received as much attention.

In 2017, Han et al1 published an interesting article on this topic that provided insights that should be of interest and value to otolaryngologists. The authors conducted a survey of all surgeons at 3 major teaching hospitals at the same university. The university was not specified, but the authors reported that it was in Boston. Since all of the authors are from the division of trauma, emergency surgery, and surgical critical care at Massachusetts General Hospital, Harvard Medical School, it seems reasonable to infer that the university studied was of superior quality and reputation. The authors distributed a 29-item questionnaire and received an exceptionally high response rate of 44.8% (126 physicians responding). Some of the findings were somewhat surprising.

The median age of respondents was 49 years and 77% were male. Over 80% performed more than 150 surgical procedures per year. The survey asked how many iAEs the physicians recalled having experienced within the last year. A surprisingly high 80% reported having experienced an iAE. A total of 32% recalled 1, 39% recalled 2 to 5, and 9% recalled more than 6 iAEs during the preceding 12 months. The responding surgeons admitted to substantial emotional consequences. These included anxiety (60%), guilt (60%), sadness (52%), shame/embarrassment (42%), and anger (29%). Although a few surgeons accepted psychological therapy/counseling, most (42%) reported that colleagues made up their most important support system, not friends or family.

Interestingly and importantly, many iAEs went unreported. More surprisingly, 26% of respondents preferred not to see their personal iAE rates. Of all, 38% wanted their iAE rates reported in comparison with the aggregate iAE rates of their colleagues. However, 50% did not report iAEs because of fear of litigation. The other 2 most common factors for not reporting were lack of a standardized reporting system (49%) and the unavailability of specific definitions of an iAE (48%).

This was essentially the first major study of this important problem, investigating it from the perspective of the surgeon.1 The fact that 80% of surgeons remembered at least 1 iAE within the past 12 months is particularly surprising in light of reports that placed the incidence at 1.5% to 2%, with most of the iAEs being organ lacerations, hemorrhage, and enterotomies.2 This suggests strongly that the problem is much more widespread than most of us might think, possibly due to factors that prevent physicians from reporting iAEs. Rather than asking the surgeons directly, most previous papers gathered data retrospectively from operative notes that might not have documented iAEs clearly.

It is also clear from this study that iAEs affect surgeons substantially. Surgeons tend to be dedicated perfectionists. Involvement in an iAE takes a great personal and emotional toll. At present, there are exceedingly few peer-support programs that include specific assistance for surgeons or others involved in iAEs.3,4

Like surgeons in other disciplines, it is exceedingly likely that otolaryngologists experience iAEs, probably more frequently than we recognize as a specialty. Although the article by Han et al has some limitations including possible response bias, the fact that the study was limited to one university, and the fact that surgical trainees were not included in the study, it should be of considerable interest to all of us in otolaryngology. First, we should recognize that we are not alone in experiencing an iAE from time to time and possibly more often than we might have guessed was common. Second, since the published study did not look at otolaryngologists specifically, a study of iAEs among otolaryngologic surgeons, and the physicians’ response to those iAEs, should be considered. Third, the study clearly reveals that iAEs are underreported. Otolaryngology as

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a field should consider pioneering a more effective approach to this problem, possibly utilizing Regent. However, it is clear that iAEs are underestimated, underreported, and that their impact is underappreciated and undertreated. Otolaryngologists should be at the forefront of those trying to do better.

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