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Do We Need a Concept of Intraoperative Complication?

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Cunningham and Kavic [1] rightly note that standard accounts of surgical complications—ours included—have focused on postoperative events [2, 3]. As they point out, this postoperative focus leaves open the question of how we should categorize adverse intraoperative events. They argue that we should distinguish between two types of adverse intraoperative events: those that introduce additional risk of postoperative complications and those that do not. On their account, adverse intraoperative events that introduce additional risk of postoperative complications are intraoperative complications, whereas those that do not are simple errors.

Cunningham and Kavic say little about why we might want to make this distinction. We take it that the underlying purpose is to focus attention on the importance of diligence in surgical performance. Gawande defines diligence as "the necessity of giving sufficient attention to detail to avoid error and prevail against obstacles" [4, p. 8]. It is clear that diligence in surgery requires us to attend not just to those adverse intraoperative events that lead to postoperative complications but also to adverse intraoperative events that increase the risk of postoperative complications.

We wholeheartedly agree about the importance of diligence in surgery, both in the intraoperative and the perioperative domains (including the process of obtaining consent). However, we are unconvinced that this should lead us to introduce a category of intraoperative complications. In our view, where an intraoperative mistake does eventuate in an adverse postoperative event, this would already count as a surgical complication. The only cases where the concept of an intraoperative complication would add anything would be where an intraoperative error increases the risk of an adverse postoperative event but, through luck, this adverse event does not occur. Given that the concept of a surgical complication has always been tied to the *actual occurrence* of adverse postoperative events, and not simply to their increased risk, we think that it would be confusing to extend the concept in the way that Cunningham and Kavic suggest. We would be happy to refer to such events as intraoperative errors, and of course agree that diligence requires us to minimize their occurrence.

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