

In Reply:

We appreciate Montes *et al.*'s interest in our article. In their 2015 *ANESTHESIOLOGY* article, the authors analyzed data from 2,929 patients who were candidates for inguinal hernia repair (men), hysterectomy (women), or thoracotomy (men) under general, regional, or local anesthesia with sedation. Four hundred and two patients (all male) underwent thoracotomy.¹ Approximately 4.4 months after surgery, 37.6% of the thoracotomy patients had chronic postsurgical pain. We think the size of the study—nearly 3,000 patients enrolled—is quite remarkable.

To summarize the conclusions from Montes *et al.*, they created a multivariate model that included all three types of surgeries where the outcome of interest was the presence of chronic postsurgical pain at 4 months after surgery. According to their model, the following variables were associated with chronic postsurgical pain at 4 months after surgery: (1) surgical procedure, (2) patient age, (3) physical health (Short Form Health Survey-12), (4) mental health (Short Form Health Survey-12), (5) preoperative pain in the surgical field, and (6) preoperative pain in another area.

In our study, we enrolled only thoracic surgery patients (both thoracotomy and video-assisted thoracoscopic surgery) without any restriction on sex. In addition, following the recommendation of the Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials group,² we excluded those patients with preexisting chronic pain problems in the chest area. Preoperative pain in the surgical area and other areas may be different for thoracotomy *versus* hernia and hysterectomy patients. Thoracotomy patients generally do not have preoperative pain in the chest. In our study, preoperative pain at rest was univariately associated with the presence of pain at 6 months after thoracic surgery. However, in the presence of acute pain in the multivariate model, this effect was not significant. We measured preoperative physical function and preoperative mental health with multiple assessments.³ It is likely that those patients with preoperative pain related to their surgical procedure have other psychosocial risk factors before and after surgery, thus limiting comparable studies. There may be unknown risk factors associated with chronic pain for hernia and hysterectomy patients that are not present in thoracic surgery patients, both male and female. In summary, our study and the study of Montes *et al.* are quite different and we cannot make direct comparisons between the factors in their final multivariate model *versus* our model. Differences between Althaus *et al.* and our study are even greater, since only two patients had thoracic surgery in their study.

We recognized our limitations as noted by Montes *et al.* We also noted consistencies with other similar studies.^{4,5} When determining risk factors of postsurgical chronic pain from multiple surgeries, mixing different types of surgeries has a number of limitations, including sex, preoperative symptoms, chronic pain in other areas, and psychosocial risk factors. We agree with Montes *et al.*'s conclusion that larger,

comprehensive, prospective observational studies are needed to confirm and to understand the mechanisms leading to chronic pain after thoracic surgery.

Competing Interests

The authors declare no competing interests.

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Keep American Society of Anesthesiologists Physical Status Classification System Simple, Stupid

To the Editor:

We read with great interest the paper of Hurwitz *et al.*¹ that demonstrated more appropriate American Society of Anesthesiologists Physical Status Classification System scores (ASA scores) and reduced interrater variability when the subjective examples provided to the ASA score² were used. We suspect, however, that routine use of these examples may hinder the universal application of the ASA score. First, the examples provided are not fully comprehensive, and they will need to be memorized and easily accessible. Perhaps a mobile app could be created to calculate the correct ASA score, but even this does not guarantee uniform application. Second, as Sweitzer³ emphasized in the accompanying editorial, the universal successful application of

the ASA score is related to its simplicity. The ASA score has penetrated beyond anesthesia and even beyond human medicine.⁴ It may even be considered on a par with the Apgar score.⁵

We hesitate to support the authors' recommendation to use the examples to the ASA score, instead of using common sense and simple rules. Having a list of examples transforms a simple albeit subjective universal score into a cumbersome one. Keep it simple, stupid (KISS).⁶

Competing Interests

The authors declare no competing interests.

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In Reply:

I thank Drs. Avidan and Weiniger for their comments on my article.¹ Their suggestion and use of the acronym KISS (keep it simple stupid) summarizes the point of my editorial much more succinctly than my two pages. I could not agree more with them that adding nonvalidated examples to a simple, “commonsense” categorization may hobble the time-honored utility and universal use of the American Society of Anesthesiologists (ASA) Physical Status Classification System. I smiled when I saw the veterinary reference in their letter. I had originally referenced a study using the ASA classification in veterinary anesthesia but removed it due to space constraints.² Anesthesiologists need to be extremely cautious before altering a tool as far-reaching and surprisingly robust as the ASA classification in the practice of medicine, even across genera.

Competing Interests

The author declares no competing interests.

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In Reply:

We thank Drs. Avidan and Weiniger for their comments related to our article, “Adding Examples to the ASA-Physical Status Classification Improves Correct Assignment to Patients.”¹ They posit that the addition of objective examples to the previously subjective American Society of Anesthesiologists Physical Status (ASA-PS) Classification System may hinder the universal application of the ASA-PS score by unnecessarily increasing the complexity of the system.

As stated in their letter, “the ASA score has penetrated beyond anesthesia.” It is our belief that this is exactly why the examples *should* be used. With the increasing use of the ASA-PS score by nonanesthesia providers, there are many assigning ASA-PS who do not have the anesthesia-related training to understand the differences between classifications. Although we agree that physician anesthesiologists currently use “common sense” in determining the ASA-PS, the gestalt that many of us have in applying the ASA-PS in practice may not exist for those who do not have experience in anesthesiology. Additionally, poor interrater reliability for the ASA-PS has been shown repeatedly.^{2–4} For these reasons, the ASA-PS examples may ultimately prove more useful for nonanesthesia providers than anesthesia ones. As we demonstrated, with examples there was improvement in correct assignment for anesthesia and nonanesthesia providers with no significant difference in the rate of correct assignment between anesthesia-trained and nonanesthesia clinicians.¹ We reiterate that the examples are guidelines and recognize the list is not comprehensive; the examples should provide a framework indicating the most likely appropriate ASA-PS score for commonly encountered diseases. The final determination of ASA-PS should be made by a physician anesthesiologist. We recognize that until further studies are done, the true effect of these examples in clinical practice is yet to be seen. We agree that uniform application across the board, even with examples, is unlikely, but given the inconsistency that already exists with ASA-PS score assignments, it is hard to argue that an addition with the potential to improve objective scoring should not be used clinically.