American Society of Anesthesiologists' Physical Status Classification: Should it Focus on Every Disease?

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To the Editor,

The physical status (PS) classification of the American Society of Anesthesiologists (ASA) is a simplified guidance based on the severity of the systemic illness of the patients, to standardize the categorization of the patients during the pre-operative assessment[1].The main advantage of ASA PS classification is its simplicity, requiring no complex calculations. Its strengths are well-established (time-tested) for over eight decades and widely accepted worldwide[2]. A few limitations of this classification have been pointed out recently[2]. Nevertheless, they are purely due to the inappropriate applications and there is no major problem with the classification as such.

The ASA PS classification has been evolving since its introduction in 1941[2,3]. It has undergone regular updates to suit the prevailing clinical trends, and the recent amendment was published in December 2020. Notably, pregnancy and neonates/infants populations are classified above ASA status 11.

An important point to note is that the interpretation of the ASA classification can vary among clinicians. This could be due to misinterpretations of the examples published, subjectivity issues, and the incorrect approach of certain specialty practitioners[2,3]. For instance, the nonanesthesiologists assigned a significantly lower grading than the anesthesiologists for the same patients requiring sedation4. It is difficult to ascertain whether this was "intentional" or due to some unknown factors. Of note, in contrast to the incorrect grading that happened "en masse" in case of interrater issues, these upcodings or downcodings occurred only on a few individual cases[2]. These issues can be overcome if the interrater reliability is improved. Also, the ASA grading provided by the anesthesiologists should be taken as final rather than the one provided by the nonanesthesiologists for the same case. If there is a discrepancy even among the anesthesiologists, the ASA grading provided by the anesthesiologist who assessed the patient on the day of surgery and was involved in the management should be taken as final. This should be applicable for the assessment of hospital performance, quality ratings, and financial purposes[5].

There are many diseases/disorders we face in our day-to-day practice. While some of them are common, some may be rare. It is difficult, or rather impossible, to focus on every condition by the ASA to apply them in the classification. Moreover, the risks of the surgery per se are not considered in the ASA classification, an inherent problem, oft-discussed. Conceivably, it is inevitable as the ASA classification's main focus is on systemic diseases and not on the surgical risks. Based on the aforementioned factors, the ASA classification has a limited role in predicting the risk if applied as a single tool. Adding other tools that focus on the surgical factors will help to predict the postoperative mortality and morbidity accurately[2].

There have been a few concerns regarding the omission of the elderly population in the ASA PS grading[2]. However, I believe that this should not be a major problem as most of the elderly population will have some systemic diseases/disorders, thus making them grade 2 or 3 by default.

Similarly, the inclusion of "frailty" to the ASA PS classification in the future has also been debated recently, although it finds a place in the preamble as a compliment[1]. The review article on the recent amendments states, "frailty should become a standard part of a comprehensive preoperative evaluation and could well be incorporated into future amendments to the ASA Physical Status system"[2]. However, the inclusion of

frailty scores[6] (regardless of 5-item or 11-item scale) would make the ASA PS classification a "complex" one, as it requires a complex calculation and I am afraid that it will make the ASA PS classification losing its simplicity, the core aspect. Importantly, the ASA PS grading is part of the frailty scores[6].

Concerning the oncological conditions, I came across an article published in another journal recently[7]. Gupta et al. opine that the ASA PS classification should also focus on the oncological conditions of adult patients, and grade them with a higher level (2 or above), like the pediatric examples[7]. I understand their concerns, however, it needs further elaboration. First, we can very well adopt the pediatric examples ("oncologic state in remission"- ASA 2, "oncologic state"- ASA 3, "advanced oncological state"-ASA 4)[1,2] for the adults too if the physical conditions correlate. This can be considered tailoring to individual cases. Second, Gupta et al. acknowledge that cancer is a "systemic disease" and the chemotherapy, radiotherapy, hormonal therapy, etc. can have serious systemic effects[7]. In that case, any patients with malignancy will be classified accordingly (ASA PS 2 or above) by default. Moreover, the majority of the oncological patients would have anemia or other systemic diseases, smoking/alcohol habituation, thus making them of ASA 2 at the least. Notably, applying the pediatric example, these patients are considered grade 2 even if they are in remission. Therefore, the question of classifying them as ASA 1 does not arise.

There are innumerable surgical conditions that alone cause significant risks, although the patients would come under ASA PS 1. Gupta et al. state, "patient with carcinoma ovary for major abdominal surgery with no comorbidities"[7] should be classified ASA PS above 1. As mentioned earlier, this is oft-discussed, but nothing further can be done for this as the ASA classification's main focus is on systemic diseases, and not on the complications arising purely because of the surgery.

To conclude, ASA PS classification is simple yet robust. It is the discretion of the individual clinician to apply this simple guidance in their day-to-day practice (tailored to the individual cases, as mentioned earlier). It is impossible to focus on many diseases/disorders, even if they are common. In simple terms, precision is impractical in clinical assessment, although we should strive for perfection. Hence, the future amendments should retain its simplicity as a fundamental aspect.

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