A practical guide to the American Society of Anesthesiologists-physical status classification (ASA-PS)

Sir,

We read the brief communication, "Reliability of American Society of Anaesthesiologists physical status classification" by Nicola Parenti in the Indian Journal of Anaesthesia with great interest.[1] This systematic review on the reliability of the American Society of Anesthesiologists physical status (ASA-PS) classification showed a wide inter-rated agreement range and suggested a reliability test for the users before using it for general communication. We are of the opinion that the training on ASA-PS classification system should be uniform, up to date and standardised for the results of reliability tests to be commendable.

The ASA-PS classification was amended on December 13, 2020 (original approval: October 15, 2014) and it includes the paediatric and obstetric examples.[2] We intend to highlight the salient features of this amendment to improve the understanding and ultimately narrow the gap in the variability of its use.

The purpose of the ASA-PS classification is pre-operative assessment and communication of the patients' medical condition.[2] In combination with other factors like type of surgery and frailty, it can imply perioperative risks and complications, though stand-alone it does not predict perioperative risks.[2,3] Currently, there is tremendous emphasis on improving the perioperative assessment and ultimately patient outcomes using the ever-advancing healthcare information technology.[4,5]

The definitions and examples of the ASA-PS classification serve as guidelines for the clinicians to follow. The clinicians may develop their institution-specific ASA classification allocation examples incorporated into their health care information technology system.

ASA-PS assessment is done during each preanesthetic visit. The final assessment is done after the evaluation of the patient on the day of anaesthesia care by the anaesthesiologist in-charge. The status of the patient at the time of operation is important e.g., presence of rhonchi in a previously well-controlled chronic mild lung disease patient at the time of operation.

There are mainly five points to consider for assigning ASA-PS classification. i) presence of co-morbidities like diabetes, hypertension, asthma, and other systemic diseases with or without functional limitations, ii) social habits like smoking, alcohol use iii) whether the patient is pregnant or not, iv) body mass index (BMI) of the patient, and v) whether the operation belongs to the elective or emergency category.

For instance, a 21-year-old man who is an active smoker and posted for emergency acute appendicectomy, would be assigned ASA-PS II E in view of being an 'active smoker' and emergency nature of the operation.

Similarly, a 50-year-old lady who is posted for elective mesh hernioplasty and has well controlled diabetes mellitus on regular medication with no functional limitations, would be assigned ASA-PS II in view of the well-controlled diabetes.

Likewise, a 21-year-old primigravida, with a BMI of 50, posted for emergency lower segment caesarean section for cord prolapse with no known medical illness, would be ASA-PS III E, in view of a BMI of 50. Though pregnancy is ASA-PS II, a BMI >39 is ASA-PS III, and thus, a higher class is assigned.

Furthermore, a 19-year-old boy with polytrauma with massive intraabdominal bleeding in hypotensive shock, posted for emergency exploratory laparotomy, would be ASA-PS V E because he is not expected to survive without operation.

Also, a 50-year-old man who is a known case of chronic obstructive airway disease on regular medication, posted for knee arthroscopy and is currently having rhonchi on examination, would be ASA-PS III in view of the active rhonchi.

The ASA-PS classification does not consider the age of the patient, the risk of difficult airway, Mendelson syndrome, intraoperative bleeding, and complexity of the operation. These factors can significantly increase the perioperative morbidity and mortality. There is considerable variation in ASA-PS classification allocation due to the inconsistent understanding of the definitions.[6]

Nevertheless, despite its limitations, the ASA-PS classification is widely used in anaesthesia practice. This insight is worth an evaluation for simplified training and teaching of ASA-PS classification. The uniform and standardised teaching can prompt reduction in inter-user variance and improve reliability.

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REFERENCES

1. Parenti N, Reggiani ML, Percudani D, Melotti RM. Reliability of American Society of Anesthesiologists physical status classification. Indian J Anaesth 2016;60:208-14.
2. ASA Physical Status Classification System developed by Committee on Economics. Last Amended: December 13, 2020 (original approval: October 15, 2014). Available from: https://www.asahq.org/standards-and-guidelines/asa-physical-status-classification-system. [Cited 2021 February 18].
3. Thomas M, George NA, Gowri BP, George PS, Sebastian P. Comparative evaluation of ASA classification and ACE-27 index as morbidity scoring systems in onco surgeries. Indian J Anaesth 2010;54:219-25.
4. Bajwa SJS, Mehdiratta L. Adopting newer strategies of perioperative quality improvement: The bandwagon moves on…. Indian J Anaesth 2021;65:639-43.
5. Mehdiratta L, Bajwa SJS. Technology, engineering and innovations- Power buffers in the COVID driveline. Indian J Anaesth 2021;65:351-55.
6. Daabiss M. American Society of Anaesthesiologists physical status classification. Indian J Anaesth 2011;55:111-5.

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