The American Society of Anesthesiologists (ASA) physical status classification system and its utilization for dental patient evaluation

Patient care efficacy and safety of the patient during dental treatment is of paramount importance to all those providing dental care – the dentists, dental hygienists, public health dental hygienists, dental assistants, and the expanded function dental assistants. The demographics of a dental patient have changed considerably in the recent past, as the typical life span of population has increased. This may be attributable to advancements in medicine, as well as management of once life-threatening medical conditions now regarded as chronic manageable diseases. In the Western world, there are better facilities for patient transportation. This brings patients of all walks of life, with multiple medical conditions, and having polypharmacy, reporting for dental care. It is incumbent upon us to be vigilant and attend to the dental patients with complex medical conditions.

The ASA physical status (ASA PS) classification was first developed in 1941 by the American Society of Anesthetists, later known as the American Society of Anesthesiologists. The latest version of the ASA classification was approved in 2014. Its intent was to evaluate the preoperative status of surgical patients. The ASA classification is a good independent predictor of perioperative morbidity and mortality and has been criticized for its implicit assumption that age is unrelated to physiologic fitness. This assumption may be untrue, as neonates and elderly are far more delicate in their tolerance of anesthetic agents compared to young adults. Therefore, in the dental context, the ASA classification is only used in terms of overall evaluation for fitness as a dental patient and not purely a “surgical risk indicator.”

The ASA 1 patient is typically a normal healthy patient who is not obese (BMI < 30) and a nonsmoker with good exercise tolerance. The ASA 2 patient may have mild systemic disease such as mild hypertension, obesity with BMI > 30 but under 35, and be a frequent social drinker or a smoker.

The ASA 3 patient is someone with a severe systemic disease that is not life-threatening. Examples include poorly controlled hypertension, diabetes, morbid obesity, chronic renal failure, stable angina, an implanted pacemaker, or someone with acute exacerbations of chronic bronchospastic disease. People with severe systemic disease that presents a constant threat to their lives, such as unstable angina, poorly controlled cardiopulmonary disease, symptomatic congestive heart failure, recent myocardial infarction, or stroke are categorized as ASA 4 patients.

Although ASA 1, 2, and 3 patients can be managed at a dental facility, ASA 4 and over require immediate medical attention and urgent or emergency dental care can be provided while the patient is admitted to the hospital. The ASA 5 is a designation given to someone who is not expected to survive beyond the next 24 hours without surgical intervention. Patients with an ASA 5 classification may include those with brain trauma, ruptured aortic aneurysm, or massive trauma. The ASA 6 patient is brain-dead and whose organs are being removed for transplantation.

The ultimate goal of the ASA PS classification for dental patients is one of safety. The ASA PS classification is certainly a validated tool for surgical risk, but there is skepticism for its use in dentistry. In one study,
the dental practitioners did not find ASA PS very helpful due to some of its limitations. It would be useful if all dentists are well educated in its use as well as its limitations. Its use in medical or surgical risk assessment, especially in relation to conscious sedation is unquestionable. In the future, better designed studies are needed to validate ASA PS as a viable tool for every dental patient needing treatment, whether or not they are undergoing conscious sedation.

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REFERENCES