tion level (AUC = 0.89 [95% CI: 0.70–1.00]; $p = 0.026$) and a higher H-L value (H-L = 1.77; $p = 0.99$). It also underestimated mortality (O:E = 1.5). P-POSSUM was also associated with an excellent discrimination level (AUC = 0.95 [95% CI: 0.87–1.00]; $p = 0.010$), but lower than SORT, while underestimating the mortality rate at a higher level compared with SORT (O:E = 3). In addition, P-POSSUM was associated with a higher H-L value (H-L = 1.58; $p = 0.99$) in comparison to SORT.

There are certain limitations to the present study. In fact, the design of the study was retrospective, and the study population was small. Nonetheless, this is the first evidence regarding the validity of SORT in patients with pancreatic cancer undergoing surgery. In addition, we demonstrated that SORT is associated with excellent discrimination and an appropriate level of calibration in predicting postoperative mortality. Furthermore, our outcomes suggest the superiority of SORT compared with POSSUM and P-POSSUM. Future studies should further assess SORT in a greater study population of patients with pancreatic cancer undergoing surgery, with a greater follow-up, along with comparing it with other risk assessment tools.

Ethical approval

Ethical approval was obtained by the Scientific Committee of the University Hospital of Larissa (Protocol nº 50271/30-10-19).

Conflicts of interest

The authors declare no conflicts of interest.

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Airway management in obese patients

Dear Editor,

We read with interest the article of Turna et al. [1] on their randomized trial of performance of the Airtraq videolaryngoscope versus the intubating laryngeal mask airway (ILMA) in obese patients. There are several aspects to the study we believe necessary to consider.

Airway management in obese patients is a challenging issue associated with a high incidence of complications. The accumulation of adipose tissue causes several changes in airway anatomy and respiratory function. Thus, obesity is associated with, among others, decreased pharyngeal area, obstructive sleep apnea, restrictions in neck flexion, narrow jaw opening, enlarged tongue, reduction in functional residual capacity and alveolar oxygen reserve, and increase in O_2 consumption. Therefore, obese patients are at increased risk of difficult mask ventilation, difficult tracheal intubation, and hypoxemia during the process of securing the airway, even after short periods of apnea. The core recommendations of the recent guidelines focus on limiting the duration and number of attempts at tracheal intubation in order to achieve early atraumatic intubation, the philosophy on which the vortex approach is based. Accordingly, an undue number of attempts to test a device is not justified. Thereby, it was published in 2016 a useful consensus on airway research ethics that every researcher should take into account. [2] It recommends limiting to a maximum of two failed attempts before following the usual progression in the airway management algorithm and restricting the inclusion of patients to ASA I and II to minimize harm.

Likewise, direct laryngoscopy could not be the most suitable rescue method after the unsuccessful use of a videolaryngoscopy or an ILMA given that its probability of success can be lower in this situation. Perhaps, it would have been more appropriate to use the other device under study as a backup plan. In addition, any blind technique should be avoided due to the significant failure rate, the frequent need for repeated attempts, and the potential for airway trauma, which can result in deterioration of ventilation. [3] Therefore, fiberoptic intubation through the ILMA is the method recommended.

On the other hand, testing a laryngeal video mask as the Totaltrack VLM (Medcomflow S.A., Barcelona, Spain) instead of the ILMA versus the Airtraq would allow a more adjusted comparison. In fact, it is a device similar to Airtraq since it has a guide channel and a fiberoptic system with LCD screen that provides a view of the larynx and tracheal tube as it passes through the vocal cords. [4] It also combines a supraglottic airway device with the described structure allowing to perform intubation after securing the airway and establishing optimal ventilation limiting the period of apnea. [5] This is especially advantageous in obese patients since they have reduced physiological reserves. [5] Similar clinical trials are necessary to determine the most reliable and safe airway method for this population.

Conflicts of interest

The authors declare no conflicts of interest.

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Medicinal cannabis: new challenges for the anesthesiologist

Dear Editor,

Recent years have witnessed a growing debate on using medicinal Cannabis for the treatment of several medical conditions, given its wide-range therapeutic effects and some research having shown favorable results for its use, such as for difficult control epilepsy disorders, patients with nausea and vomiting resulting from chemotherapy, some psychiatric disorders as anxiety, and for controlling cancer and non-cancer pain.[1–3]

Medicinal Cannabis refers to the medicinal use of the plant and its components for medical purposes using some of the active components with pharmacological properties and has been used for millennia. The major components used are δ9-Tetrahydrocannabinol (THC), the major component presenting psychoactive action on the Central Nervous System (CNS), and Cannabidiol (CBD), cannabinoid acids, cannabinol, cannabigerol and cannabivarins, components with pharmacological properties on the CNS, but without psychoactive action. The concentration and quality of THC and CBD depend on the plant lineage and type of cultivation.[2–4]

In this scenario, it is of interest to anesthesiologists to access a wider range of options to control pain, given these professionals are also responsible for analgesia, especially those trained in pain and working in the specialty. When taking into account relevant issues in pain control, especially side effects due to the chronic use of opioids, and in the pursuit of parsimonious use, medicinal cannabis can be helpful in this scenario, given it presents less severe side effects such as opioid related respiratory depression, as the use of cannabinoids does not pose a risk of the complication.[1,5]

The major effects of cannabinoids are through their action on Cannabinoid receptors (CB), which can be type 1 (CB1), located in the central nervous system, mainly in the frontal cortex, basal ganglia and cerebellum, in addition to spinal cord, adipocytes, gastrointestinal tract, thyroid, adrenal glands, gonads and immune cells; or type 2 Canabinoid receptors (CB2), expressed mainly in immune cells, CNS glial cells and peripheral tissue.[2,4]

THC is a partial agonist of type I (CBD I) and type II (CBD II) cannabinoid receptors, which acts on multiple conditions and symptoms, such as pain, nausea, spasticity, appetite stimulation, and is also responsible for the psychotropic effects of the plant. Cannabidiol (CBD), in turn, has no psychoactive effects, has low direct affinity to these receptors, and works as a negative allosteric modulator of CB1, which attenuates the side effects of THC, in addition to exerting