LETTERS TO THE EDITOR

Airway management in intensive care units

Manejo de la vía aérea en las unidades de cuidados intensivos

Dear Editor,

We wish to congratulate Gómez-Prieto et al.1 for their nationwide survey on airway management (AM) and also make a few contributions while insisting on how important it really is.

The NAP4 was a turning point after proving that different factors contributed to AM-induced mortality/brain damage whose incidence rate in intensive care units (ICU) is 55 times higher compared to intraoperative settings.2 We hereby draw a comparison between factors regarding the critically ill patients and findings from the survey shown between brackets.

The human factor – present in up to 4.5 factors on average per case – the lack of prior assessments and deficient planning; several attempts and delays when transitioning to the invasive cervical approach can be found in the most dramatic cases of all. Other contributing factors are the absence of pre-established strategies (protocols, absent in up to 77% of the ICUs surveyed) and sub-optimal training. Clinical guidelines and algorithms have changed the medical practice and stimulated the culture of "planning" and they are used as cognitive support in critical situations to increase the level of safety.3 We should say here that the DAS has recently published a clinical guideline/specific algorithm for the AM of critically ill patients that will surely become a reference tool.4 The prior assessment of the airway (absent in 22.8%) is indicated even in the most urgent situations.4 We are lacking the use of the MACOCHA score in the survey though – the only one that has been validated in critical care settings. Similarly, it seems undeniable that there is this need for continuous medical training (53.5%) in technical and non-technical skills (team work, leadership or the right progression of the interventions) and in the simulation of unexpected and unusual scenarios.

Regardless of the existing heterogeneity in the devices selected for AM among different institutions, today it is recommended to have one device for primary use available plus one alternative only in order to avoid cognitive overload and facilitate the decision-making process. The actual recommendations indicate that video laryngoscopes (53.5%) and second-generation laryngeal masks (%) should be available wherever AM is a common practice.4,5 It is surprising to see that angulated-blade video laryngoscopes are everybody’s choice to the detriment of standard-blade video laryngoscopes. There is evidence that the use of the former (GlideScope® and McGrath® MAC) in critical care may increase morbimortality though.

It is also striking to see that the use of capnography has not been assessed given it is responsible for over 70% of all deaths in the ICU setting2 and its universal implementation in ICUs has been considered the only change that is powerful enough to avoid mortality.2 This is so because it allows us to diagnose early failed intubations and accidental displacements of cannulas and endotracheal tubes.

We need a major overhaul to match the actual practice to the actual recommendations. As professionals from different fields of expertise we have the possibility of meeting Bromiley’s request6 of managing airways safe and securely. Articles such as this one conducted by Gómez-Prieto et al.1 are key if we really want to make a change.

References

In conclusion, while much remains to be done in airway management in the ICU, the fact that recommendations for routine clinical practice are becoming available may imply changes in terms of patient morbidity-mortality. Further studies will be needed to evaluate the impact of these recommendations and to establish new critical airway management protocols.

References