

## EDITORIAL

# Should the next Guidelines on Pain, Agitation and Delirium Management in critically ill patients include Anxiety?

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With the vast expanding of scientific research in intensive care medicine, the focus has broadened from classical types of organ failure such as failure of the circulation, lungs and kidneys to remote types of organ failure such as ‘brain failure’ (delirium) that has been shown in recent years to have no less of an adverse impact on survival as, for instance, acute kidney injury.<sup>1,2</sup> In addition, attention for the level and content of consciousness and its fluctuation over time seems to gain importance because critically ill patients nowadays tend to get ‘conscious sedation’ with the aim to facilitate mechanical ventilation when awake or easily arousable but comfortable.<sup>3</sup> The alternative – to deeply sedate all mechanically ventilated patients – has been shown to increase the duration of mechanical ventilation, ICU stay, costs and the incidence of delirium.<sup>4</sup> The trend of conscious sedation has shifted the approach to critically ill patients from a typically impersonal physically oriented one to an approach incorporating more or less intensive communication with the patient at the bedside. Dealing with awake patients on mechanical ventilation thus requires a keen eye for the feelings, hopes, wishes and – last but not least – fears and anxieties of the patient.

The study by Bos and colleagues in this issue of NJCC compares several scoring tools for the presence and level of anxiety in awake mechanically ventilated patients with varying duration of mechanical ventilation.<sup>5</sup> The authors acknowledge the importance of anxiety assessment in ICU patients from the perspective of patient comfort and their investigation shows that a shortened version of a previously validated anxiety assessment tool (Spielberger State Anxiety Inventory, SAI) seems acceptable for use in clinical practice compared with the SAI as reference standard, and has better clinimetric properties than the Faces Anxiety Scale (FAS), a visual analogue scale using facial expressions with an increasing level of anxiety. However, some questions come to mind when trying to interpret the results and translate them for implementation in clinical practice. For instance: could

hypoactive delirium have been a confounding factor, since there is no mention of systematic assessment of delirium and this form of delirium is notoriously hard to recognise without screening with a validated tool? And: are there strong reasons to assess and manage anxiety other than patient comfort? On a more philosophical level: is some anxiety in a mechanically ventilated patient not ‘proof’ of a healthy state of mind (I know I would be anxious with a tube stuck between my vocal cords) and its absence a sign of disease severity rather than a reassurance? Finally: how big is the problem of anxiety in critically ill patients, since it can only be assessed in awake and cognitively intact patients representing a minority? Bos and colleagues do not provide data on the percentage of the total number of their patients who were included in their study and therefore the magnitude of the problem is not entirely clear. In a recent trial assessing the impact of musical therapy on patient anxiety level and sedation intensity in critically ill patients, only 5.3% of those assessed for eligibility were included because anxiety assessment and musical therapy could not be applied in most patients because of sedation levels being too high.<sup>6</sup>

Interestingly, the recently published Clinical Practice Guidelines for the Management of Pain, Agitation, and Delirium in Adult Patients in the Intensive Care Unit<sup>4</sup> endorsed by the Society of Critical Care Medicine mention the frequent occurrence of agitation and anxiety but only focus on pain assessment scales and management and sedation scales, probably due to lack of research on anxiety in ICU patients. The study by Bos *et al.* helps to fill the knowledge gap by at least providing us with a useful tool to assess anxiety in our patients. What further scientific issues should be addressed to put anxiety ‘on the map’ as a symptom worthwhile to assess and manage in all awake mechanically ventilated patients now that screening tools tested for use in clinical practice are available? First, anxiety may be associated with increased sympathetic tone, but it is not known whether anxiety thus results in increased rates of complications associated with sympathetic

activation, such as myocardial infarction or disturbances in the microcirculation leading to gastric ulceration, for instance. Second, it would be valuable to know the prognostic significance of the presence and severity of anxiety in our patients to be able to assess the potential impact of reducing anxiety on clinical outcomes. Third, more data on appropriate management of anxiety are necessary, because medical treatment of anxiety may have adverse consequences in terms of possible increase in use of benzodiazepines or other sedatives hampering our aim for conscious sedation.

A recent trial, already referred to above, by the authors who published the SAI,<sup>6</sup> gives some hope that anxiety assessment and management may be included in a next version of the PAD guidelines. In a randomised clinical trial, Chlan *et al.* found that musical therapy in awake critically ill patients resulted in both less anxiety and less intense sedation. However, as always, more research is necessary on the impact of such therapies on clinical outcomes. This may certainly be facilitated by the fact that anxiety assessment in mechanically ventilated patients seems possible in an easy and reliable manner.



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