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Sedation level and prevalence of delirium: response to Brummel and Ely

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Dear Editor,

We thank Dr. Brummel and his team [1] for their interest in our paper [2]. We agree that the prevalence of delirium in awake ICU patients in our study is similar to that found in earlier studies (42.5 % in the study by Ely et al. [3], 31 % in our study). However, we propose that reports on delirium should be stratified for a sedation score during the assessment, because the apparent prevalence of delirium is dependent on how a depressed level of consciousness after sedation stop is interpreted. For instance, of 471 daily evaluations completed during the study by Ely et al. [3], a diagnosis by the reference standard of delirium was made in 25.2 %, stupor in 21.3 %, and coma in 28.5 % of all observations. Yet, the authors report that delirium occurred in 83.3 % of their patients. Unfortunately, in the validation studies neither CAM-ICU nor ICDSC described how sedated patients were handled.

The new DSM-V criteria for delirium published recently indicate that non-comatose patients with a reduced level of arousal of acute onset should be classified as having

severe inattention and cognitive change, and hence delirium. We agree that such patients can be delirious. Nevertheless, it should be noted that the same criteria—which correspond to a RASS-2/-3 level—can also apply for sedated healthy volunteers, and patients with uneventful postoperative course during awakening from anesthesia.

By no means do we suggest that delirium should not be considered in sedated patients. However, we question the specificity of the assessments tools CAM-ICU and ICDSC in sedated patients who cannot hold eye contact for 10 s. In contrast to what has been proposed for the CAM-ICU [4], we suggest to use the delirium assessment tools after sedation stop, and to indicate the level of consciousness during the assessment. An exclusive diagnosis of delirium is impossible before effects of sedation are ruled out. Regular sedation stops have been proven to improve outcome and reduce resource use.

We should make every effort not to miss a diagnosis of delirium. At the same time, misdiagnosing persistent sedation as delirium is dangerous as well: a recent delirium trial was prematurely stopped because of increased mortality in the treatment group [5]. In this study, almost 40 % of the included patients had a negative RASS, half of them a RASS of -2. In our view, sedation should be managed with a protocolized approach including a sedation goal and frequent assessments, and not with a delirium screening tool.

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