Posttraumatic stress disorder in survivors of severe somatic illness and ICU treatment

H.P. Kapfhammer, Department of Psychiatry, Medical University of Graz, Graz, Austria

Aim: Patients suffering from severe somatic illness (e.g. burns, traumatic injuries, myocardial infarction, major surgery, acute respiratory distress, septic shock) that leads to ICU treatment face a high risk of psychiatric morbidity. There is a major challenge to C-/L-psychiatry both during acute treatment and long-term. The presentation will focus on the PTSD risk in survivors of acute respiratory distress syndrome (ARDS) and septic shock.

Method: A literature survey on the general topic will be given in the introductory part of the presentation (1). Some major findings derived from own empirical studies on ARDS and septic shock will be summarized (2, 3).

Results: ARDS and septic shock define medical conditions of acute respiratory insufficiency or/and systemic inflammation. Both medical conditions are often associated with multiorgan dysfunctions. As a rule, intensive care is based on mechanical ventilation often requiring high doses of sedatives and narcotics. Despite major progresses in intensive care medicine the rate of mortality is still very high among these patients. Several disabling psychological sequelae, such as cognitive dysfunctions, anxiety and mood disorders, posttraumatic stress disorders (PTSD) have to be evaluated in long-term survivors regarding a persisting negative impact on health-related quality of life. Several factors influencing the risk of PTSD in ARDS survivors may be discussed: increased CO_2 triggering panic affects, mismatch of norepinephric overstimulation and Cortisol insufficiency, negative effects of high doses of benzodiazepines resulting in oversedation, prolonged phases of weaning and more frequent states of delirium, number of traumatic memories during ICU. Consolidation and retrieval of traumatic memories of the ICU stay are influenced by complex factors. From a clinical point of view prophylactic stress doses of hydrocortisone may reduce the major risk of PTSD associated with ARDS and septic shock.

Conclusion: ARDS or septic shock not only define a major challenge to C-/L-psychiatry but offer an interesting model to elucidate some basic neurobiological mechanisms underlying the pathophysiology of PTSD and to develop some new prophylactic strategies for this often chronically disabling psychiatric condition.

References

- 1. Davydow DS, Gifford JM, Desai SV, Needham DM, Bienvenu OJ. Posttraumatic stress disorder in general intensive care unit survivors: a systematic review. Gen Hosp Psychiatry 2008; 30: 421-434
- Kapfhammer HP, Rothenhäusler HB, Krauseneck T, Stoll C, Schelling G. Posttraumatic stress disorder in long-term survivors of ARDS: Results of a psychiatric follow-up study and psychological tests. Am J Psychiatry 2004; 161: 45-52
- 3. Schelling G. Post-traumatic stress disorder in somatic disease: Lessons from critically ill patients. Brain Res 2008; 67:229-237
- 4. Weinert C, Meller W. Medical post-traumatic stress disorder. Catching up with the cutting edge in stress research. Crit Care 2007; 11:118

Correspondence: Univ. Prof. Hans-Peter Kapfhammer, MD, PhD, Dipl Psych Department of Psychiatry Medical University of Graz Auenbruggerplatz 31 A-8036 Graz Hans-peter.kapfhammer@klinikum-graz.at