



Post Traumatic Stress Disorder After Intracerebral Hemorrhage

Kerry Alexandra Vaughan BA; Brad E. Zacharia MD; Donald Edmondson PhD; Samuel S. Bruce BA; Zachary L Hickman MD; Simon Gerard Heuts; Amanda M. Carpenter; Michael Maurice McDowell BS; E. Sander Connolly MD

Columbia University Medical Center
College of Physicians & Surgeons



Introduction

Studies in patients with stroke or subarachnoid hemorrhage have identified demographic characteristics that are associated with an increased risk of developing posttraumatic stress disorder (PTSD). Such risk factors have yet to be identified in the setting of intracerebral hemorrhage.

Methods

All patients presented to the Columbia Neuro-ICU with spontaneous-ICH between 2/2009 and 3/2012 were selected. Demographic, radiographic, and clinical variables were collected upon admission. Twenty-eight patients were able to complete the PCL-C, a 17-item, 5-point Likert scale per item questionnaire for PTSD, in a follow-up interview. Two PTSD definitions were used: a common definition of a sum score of = 30 on the PCL-C, and the DSM-IV definition of at least 1 item with = 3 points in questions 1-5, at least 3 items with = 3 points in questions 6-12, and at least 2 items with = 3 points in questions 13-17.

PCL-C Questionnaire for PTSD Screening in Civilians

No.	Response	Not at all (1)	A little bit (2)	Moderately (3)	Quite a bit (4)	Extremely (5)
1.	Repeated, disturbing <i>memories, thoughts, or images</i> of a stressful experience from the past?					
2.	Repeated, disturbing <i>dreams</i> of a stressful experience from the past?					
3.	Suddenly <i>acting or feeling</i> as if a stressful experience <i>were happening</i> again (as if you were reliving it)?					
4.	Feeling <i>very upset</i> when <i>something</i> reminded you of a stressful experience from the past?					
5.	Having <i>physical reactions</i> (e.g., heart pounding, trouble breathing, or sweating) when <i>something</i> reminded you of a stressful experience from the past?					
6.	Avoid <i>thinking about or talking about</i> a stressful experience from the past or avoid <i>having feelings</i> related to it?					
7.	Avoid <i>activities or situations</i> because they <i>remind you</i> of a stressful experience from the past?					
8.	Trouble <i>remembering important parts</i> of a stressful experience from the past?					
9.	Loss of <i>interest in things that you used to enjoy</i> ?					
10.	Feeling <i>distant or cut off</i> from other people?					
11.	Feeling <i>emotionally numb</i> or being unable to have loving feelings for those close to you?					
12.	Feeling as if your <i>future</i> will somehow be <i>cut short</i> ?					
13.	Trouble <i>falling or staying asleep</i> ?					
14.	Feeling <i>irritable</i> or having <i>angry outbursts</i> ?					
15.	Having <i>difficulty concentrating</i> ?					
16.	Being <i>"super alert"</i> or watchful on guard?					
17.	Feeling <i>jumpy</i> or easily startled?					

Results

Ten patients completed the questionnaire at 3-month follow-up, 6 at 6 months, and 12 at 12 months. There was no significant association between either definition of PTSD and time to follow-up. The median (IQR) PCL-C sum score for our cohort was 25.5 (21.0-32.5), and 8 (28.6%) had a PCL-C score = 30. White race (p = 0.038) was the only significant association with a PCL-C sum score of = 30. Three patients (10.7%) had PTSD consistent with the DSM-IV definition, and they only shared three symptoms (responses = 3): physical symptoms on remembrance, feeling emotionally distant, and hypervigilence.

Conclusions

In our cohort, a small percentage met the DSM-IV definition of PTSD, though an association between White race and a previously identified cutoff for likely PTSD was found. Further studies are needed to standardize the definition of PTSD in the setting of ICH and identify relevant predictors. Given previous research on the association of elevated PTSD symptoms and adverse outcomes in acute coronary syndrome patients, and the association between PTSD symptoms and nonadherence to medications in stroke patients, such research should be given high priority.

Learning Objectives

By the conclusion of this session, participants should be able to 1) Describe the impact of intracerebral hemorrhage on the mental health of patients 2) Identify symptoms of Post-Traumatic Stress Disorder in patients who are recovering or have recovered from any neurological injury.

References

PCL-M for DSM-IV (11/1/94) Weathers, Litz, Huska, & Keane National Center for PTSD - Behavioral Science Division

Powell J, Kitchen N, Heslin J, Greenwood R. Psychosocial outcomes at three and nine months after good neurological recovery from aneurysmal subarachnoid haemorrhage: predictors and prognosis. J Neurol Neurosurg Psychiatry. 2002 Jun;72(6):772-81.