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PTSD Symptoms Predict Postinjury Pain

Acute hyperarousal symptoms and posttraumatic stress disorder symptoms predict development of persistent pain over the acute postinjury recovery period. That is the finding of a study to be published in the August 2018 issue of Academic Emergency Medicine (AEM), a journal of the Society for Academic Emergency Medicine (SAEM).

The lead author of the study is Maria Pacella, PhD, a research assistant and professor of emergency medicine in the Department of Emergency Medicine at the University of Pittsburgh School of Medicine. Dr. Maria Pacella is a health psychologist with an emphasis on the psychological and bio-behavioral consequences of traumatic events. Her current research focus is on determining how ecological momentary assessment (EMA) methods— including text messaging—can enhance the prediction and prevention of PTSD in the immediate aftermath of traumatic physical injury.

The study, by Pacella et al, applied experience sampling methods (ESMs) via daily text messaging to monitor and detect relationships among psychosocial factors and postinjury pain across the first 14 days after emergency department (ED) discharge. The results indicate that experience sampling method/ ecological momentary assessment using automated text messaging systems can efficiently detect early relationships between psychosocial symptoms and pain among recently injured ED patients. These data also revealed how daily levels of hyper-arousal symptoms are associated with daily fluctuations in pain severity over time, within each person.

The findings suggest that early interventions aimed at addressing hyperarousal could potentially aid in reducing experience of pain.

Samuel McLean, MD, MPH, associate professor of emergency medicine and director of the Institute for Trauma Recovery at the University of North Carolina School of Medicine, commented:

“In the 19th and 20th centuries, physicians learned how to prevent wound infections in trauma survivors. In the 21st Century, there is a major push to learn how to prevent common, highly morbid, invisible wounds that develop after emergency department discharge: neuropsychiatric sequelae such as pain and posttraumatic stress. The work of Dr. Pacella is a step forward in understanding developmental relationships between these outcomes and suggesting potential interventions to prevent them.”

About Academic Emergency Medicine
Academic Emergency Medicine, the monthly journal of Society for Academic Emergency Medicine, features the best in peer-reviewed, cutting-edge original research relevant to the practice and investigation of emergency care. The above study is published open access and can be downloaded by following the
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SAEM is a 501(c)(3) not-for-profit organization dedicated to the improvement of care of the acutely ill and injured patient by leading the advancement of academic emergency medicine through education and research, advocacy, and professional development. To learn more, visit saem.org.

IMAGE: POST-TRAUMATIC STRESS SYMPTOMS AND PAIN
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