

Family Perspectives of Traumatically Brain-Injured Patient Pain Behaviors in the Intensive Care Unit

■ ■ ■ Brandy L. Vanderbyl, RN, MSc, MScA(N),*
and Céline Gélinas, RN, PhD*[†]

■ ABSTRACT:

Behavioral scales allow for the pain assessment of vulnerable critically ill patients who are unable to self-report. However, validity of the use of such scales is limited in traumatic brain injury patients with an altered level of consciousness as a result of the different way that these patients express pain. Family participation is considered as an important component of pain assessment for those unable to self-report, but research in this area is minimal so far. This study aimed to describe what behaviors family caregivers deemed relevant to pain for patients with a traumatic brain injury with an altered level of consciousness in the intensive care unit. Using a mixed-method descriptive design, semistructured interviews were conducted and behaviors' relevance was quantitatively rated by seven family caregivers of nonverbal patients with traumatic brain injury in the intensive care unit of a tertiary trauma center in Montreal, Canada. Family caregivers were able to provide rich descriptions of a number of behaviors they observed in their loved ones that were perceived to be relevant indicators of pain, such as muscle tension and key facial expressions and body movements. Several factors influenced how behaviors were interpreted by family, including personal medical beliefs and intimate knowledge of the patient's history. The pain behaviors determined by family caregivers can be useful in the pain assessment process of traumatic brain injury patients with an altered level of consciousness. Their input could also be helpful in further development of pain assessment tools.

© 2017 by the American Society for Pain Management Nursing

INTRODUCTION

It is estimated that 1.7 million people annually sustain a traumatic brain injury in the United States, and 275,000 are hospitalized (Faul, Xu, Wald, & Coronado,

From the *Jewish General Hospital, Montréal, Québec, Canada; [†]Ingram School of Nursing, McGill University, Montréal, Québec, Canada.

Address correspondence to Céline Gélinas, RN, PhD, Ingram School of Nursing, Wilson Hall, 3506 University Street, Montréal, Québec, Canada H3A 2A7. E-mail: celine.gelinas@mcgill.ca

Received August 15, 2016;
Revised April 7, 2017;
Accepted April 7, 2017.

1524-9042/\$36.00
© 2017 by the American Society for
Pain Management Nursing
<http://dx.doi.org/10.1016/j.pmn.2017.04.005>

2010). Many of those individuals will be hospitalized in an intensive care unit (ICU) and will likely suffer from pain but may be unable to self-report their pain as a result of their critical condition. Despite recent updates of guidelines and the progressing validation of pain scales, there is still a substantial problem in determining when pain is present for critically ill patients who are unable to communicate, particularly those with a brain injury. No current scale can adequately determine the presence of pain in those with serious brain injuries such as traumatic brain injury (TBI) with altered level of consciousness (LOC; [Arbour & Gélinas, 2014](#); [Gélinas & Arbour, 2009](#); [Le, Gélinas, Arbour, & Rodrigue, 2013](#)). Family participation is considered an important component of pain assessment for those unable to self-report, but research in this area is minimal so far ([Herr, Coyne, McCaffery, Manworren, & Merkel, 2011](#)). The aim of this study was to describe pain behaviors as perceived by family caregivers of critically ill TBI patients with an altered LOC in the ICU.

Literature Review

Critically ill patients experience moderate to severe pain that can occur at rest or during routine care ([Arbour et al., 2014](#); [Chanques et al., 2007](#); [Puntillo et al., 2014](#)). In large international studies involving critically ill adults, including those with trauma, pain was commonly reported during procedures such as turning, wound care, and tube or drain removal ([Puntillo et al., 2001, 2014](#)). Moreover, in a study of 255 patients who had been admitted in the ICU, 28% of whom had suffered a TBI, posttraumatic stress symptoms 4-6 weeks after discharge correlated with a patient's memory of pain and an inability to express needs during their ICU stay ([Myhren et al., 2009](#)). Unfortunately, many critically ill patients are unable to communicate their pain as a result of several factors, including an altered LOC, mechanical ventilation, and the administration of sedative agents or neuromuscular blocking agents. This inability to provide a self-report of pain leaves the patient particularly vulnerable to underrecognition and undertreatment of pain ([Herr et al., 2011](#)).

When self-report is impossible to obtain, behavioral indicators should be taken into account as part of the pain assessment process ([Herr et al., 2011](#)). In the Society of Critical Care Medicine practice guidelines ([Barr et al., 2013](#)), two behavioral pain scales have been suggested for clinical use: the Critical-Care Pain Observation Tool (CPOT) and the Behavioral Pain Scale (BPS). According to the available evidence analyzed in the Society of Critical Care Medicine guidelines and in a psychometric review ([Gélinas, Puntillo,](#)

[Joffe, & Barr, 2013](#)), these scales were found to be the most valid and reliable for use in adult ICU patients with nonbrain trauma, postoperative or medical causes. Some studies have also found that their clinical application may be effective in improving patient outcomes and pain management practices ([Chanques et al., 2006](#); [Gélinas, Arbour, Michaud, Valliant, & Desjardins, 2011](#); [Payen et al., 2009](#); [De Jong et al., 2013](#); [Rose, Haslam, Dale, Knechtel, & McGillion, 2013](#)).

Although scales such as the CPOT and the BPS have been developed specifically for nonverbal critically ill ICU patients, recent studies have reported that in fact patients with brain injury, including TBI, react differently to painful stimuli when they have an altered LOC ([Arbour et al., 2014](#); [Gélinas & Arbour, 2009](#); [Le et al., 2013](#); [Roulin & Ramelet, 2014](#)). For example, it has been observed that brain-injured ICU patients with an altered LOC exhibit different behaviors (such as eye opening, eye weeping, face flushing) and are less likely to grimace or become rigid in response to painful procedures as opposed to other critically ill ICU patients ([Arbour et al., 2014](#); [Gélinas & Arbour, 2009](#); [Le et al., 2013](#)). Therefore, descriptions of behaviors included in existing pain scales may not be adapted to ICU patients with a brain injury and altered LOC.

Because of their unique point of view, family caregivers should be encouraged to take part in pain assessment of those who cannot self-report ([Herr et al., 2011](#)). Family caregivers possess the valuable perspective of being familiar with the patient before and after a TBI and thus may be well-equipped to identify subtle behaviors in their loved one that could be indicative of pain. So far, little research has been done to describe family caregivers' perceptions of pain behaviors of nonverbal ICU patients. Indeed, the only study conducted in the ICU was led by Puntillo and colleagues, who compared 245 ICU patients' self-report of their pain and distress to the family member's, nurse's and physician's reports of perceived pain and distress ([Puntillo et al., 2012](#)). Findings supported that family members determined pain intensity and distress in the patient more accurately than the nurses or physicians. However, Puntillo's study was conducted with patients able to self-report, and little evidence exists about the family members' perceptions of the pain expressed by patients unable to self-report.

METHODS

Research Question

This study aimed to answer the following research question: What behaviors are deemed relevant to

Download English Version:

<https://daneshyari.com/en/article/5571266>

Download Persian Version:

<https://daneshyari.com/article/5571266>

[Daneshyari.com](https://daneshyari.com)