



Implementation of an individualized care plan for patients with posttraumatic stress disorder symptoms in a Canadian preanesthetic assessment clinic

Samantha Russell, MBChB, FCA(SA), FRCPC, CPE · Vivienne Preece, RN ·
Renée El-Gabalawy, CPsych

Received: 16 April 2024/Revised: 16 May 2024/Accepted: 21 May 2024
© Canadian Anesthesiologists' Society 2024

Keyword Preanesthesia trauma-informed care

To the Editor,

Trauma is a ubiquitous experience with approximately 76.1% of Canadians endorsing a lifetime traumatic experience. Following such trauma, about 10% of adults in Canada have moderate to severe symptoms of posttraumatic stress disorder (PTSD), with elevated rates in women and younger adults.¹ Those with clinically significant symptoms may not receive a diagnosis as many do not, or cannot, access care. Further, illness-induced PTSD and subsyndromal PTSD may be associated with fewer or subthreshold symptoms, yet still include functional impairment.² Posttraumatic stress disorder is associated with four main symptom clusters: arousal (e.g., feeling on edge, hypervigilance), intrusions (e.g., intrusive thoughts, re-experiencing), alterations in cognition and mood (e.g., depressed mood), and avoidance.¹⁻⁴ Posttraumatic stress disorder is associated with a large range of mental and physical health

comorbidities.³ The patient surgical experience represents a highly stressful event and anxiety has been identified as the worst component of the perioperative experience by patients. For patients with PTSD symptoms, medical contexts can represent a risk for retraumatization and exacerbation of symptoms leading to further impairment. Preoperative PTSD and anxiety symptoms are also associated with compromised postoperative outcomes such as delirium, sleep-disordered breathing, morbidity, length of stay, and readmission.³⁻⁵ Individuals with trauma histories and PTSD symptoms are also at particularly high risk for PTSD from surgery itself, emphasizing the importance of identifying and managing posttraumatic stress symptoms in the perioperative setting.²⁻⁵

There is no evidence-based consensus on preoperative care for individuals undergoing anesthesia who have PTSD symptomatology, representing a significant gap in care.³ Clinicians from the preanesthetic assessment clinic (PAC) at our tertiary care facility developed what we think is the first protocol in Canada to manage surgical/obstetric patients with PTSD symptomatology. This was achieved through a collaborative process involving military medical practitioners from Canada, and Psychiatry and Clinical Health Psychology departments at the University of Manitoba, together with a literature review of what is considered best practice. The protocol's goal is to offer an individualized care and support plan for patients with posttraumatic stress symptoms and improve their hospital experience by decreasing anxiety, trauma-related stimuli, and injury to themselves and staff. This, in turn, will increase their satisfaction and safety through open communication and patient-centred care.²⁻⁵

The role of the PAC nurses is to 1) identify these patients, 2) follow the preoperative consultation form, and 3) educate

S. Russell, MBChB, FCA(SA), FRCPC, CPE (✉) ·
V. Preece, RN
Pre-Anesthetic Assessment Clinic, St. Boniface Hospital,
Winnipeg, MB, Canada
e-mail: samantharussell@gmail.com

R. El-Gabalawy, CPsych
Department of Clinical Health Psychology, Max Rady College
of Medicine, Rady Faculty of Health Sciences, University of
Manitoba, Winnipeg, MB, Canada

Department of Anesthesiology, Perioperative and Pain Medicine,
Max Rady College of Medicine, Rady Faculty of Health
Sciences, University of Manitoba, Winnipeg, MB, Canada

Table Standard work for the considerate care of patients with pre-existing posttraumatic stress disorder symptoms in the perioperative setting

Purpose	To provide considerate, individualized care to patients with PTSD or posttraumatic stress symptoms, while in hospital for surgery/delivery
Desired goals/outcomes	1. Patients with PTSD will receive trigger-free care, with awareness for staff to be alerted to the risk of emergence delirium 2. Increased patient safety and satisfaction
Definitions	PTSD is characterized by: <ul style="list-style-type: none"> • Persistently intrusive negative thoughts • Hypervigilance • Lack of trust • Inability to experience positive emotions • Feelings of detachment • Sleep disturbances and nightmares • Flashbacks to trauma • Avoidance of trauma reminders • Problems with concentration • Reckless or self-destructive behaviour • Irritable behaviour, angry outbursts, aggression
Roles and expectations	Preanesthetic assessment clinic nurse clinicians will note PTSD if identified by patient or physician and assess accordingly
Ground rules and key assumptions	<ul style="list-style-type: none"> • Do not ask for cause of PTSD Asking for a cause could create a situation of more stress and anxiety, essentially causing the patient to revisit the traumatic event(s). The goal is to understand current status to enhance comfort and connect to appropriate resources.
Trigger/frequency	Every surgical/obstetrical patient with pre-existing PTSD
Process used by preanesthetic clinic nurse clinicians	<ol style="list-style-type: none"> 1. Identify: <ul style="list-style-type: none"> • PTSD treatment received and duration of treatment (medications used for treatment, ongoing or completed therapy) • Manifestations of PTSD and frequency and time of last episode (panic attacks, flashbacks, anger outbursts, becoming unusually quiet and withdrawn, weepy) • Identify triggers if patient volunteers this information (not all individuals with PTSD are able to identify triggers) • Coping methods/what makes an episode worse? • Previous anesthetic history/emergence delirium 2. Add "PTSD" to chronic problem list in electronic medical record to increase awareness of all caregivers 3. Enter PTSD history progress note in electronic medical record for team communication/awareness to ensure that the patient's triggers/coping strategies are known 4. Notify the preoperative holding unit, operating room, postanesthesia care unit, and attending anesthesiologist on the day of surgery of patient's needs to ensure that staff are aware to be alert to the increased risk of emergence delirium and be prepared 5. If PTSD symptoms are unmanaged and may impact perioperative care, refer to Clinical Health Psychology for additional support 6. Check on patient in preop holding unit on the day of surgery to reassure the patient and de-escalate feelings of anxiety in an unfamiliar setting

PTSD = posttraumatic stress disorder

other health professionals on PTSD management (e.g., not to ask for the specific cause of the PTSD, to initiate conversation relating to comfort, and address potential triggers). They follow a structured history of PTSD, identifying symptoms, frequency, treatment (both medications and therapy) received, known triggers and exacerbating anxiety factors, coping methods, grounding

strategies, and previous anesthetic reactions. The nurse clinicians add PTSD to the patient's chronic problem list and notify the health care providers of the patient's care plan including the preoperative holding area and recovery unit. If necessary, they refer the patient to a clinical psychologist before surgery for assessment and short-term treatment to

facilitate management of symptoms throughout the perioperative period (see [Table](#)).

Feedback since the protocol implementation in 2021 has been positive. These individualized care plans based on trauma-informed care generally increase patients' trust in health care delivery and improve their hospital experiences. Patients' opinions include the belief that surgery is now possible despite their trauma-related psychological symptoms, appreciation for acknowledging their needs and autonomy, and alleviation of fear associated with child delivery in prospective mothers. We believe these trauma-informed approaches warrant further attention, including evaluation of potential risks and benefits, in anesthesia settings.

Disclosures The authors have no disclosures.

Funding statement The authors received no financial support for the work submitted.

Editorial responsibility This submission was handled by Dr. Philip M. Jones, Deputy Editor-in-Chief, *Canadian Journal of Anesthesia/Journal canadien d'anesthésie*.

References

1. Van Ameringen M, Mancini C, Patterson B, Boyle MH. Post-traumatic stress disorder in Canada. *CNS Neurosci Ther* 2008; 14: 171–81. <https://doi.org/10.1111/j.1755-5949.2008.00049.x>
2. El-Gabalawy R, Sommer JL, Pietrzak R, et al. Post-traumatic stress in the postoperative period: current status and future directions. *Can J Anesth* 2019; 66: 1385–95. <https://doi.org/10.1007/s12630-019-01418-4>
3. Tolly B, Erbes CR, Apostolidou I. Posttraumatic stress disorder and anesthesia: respect for the military veterans' mind. *J Clin Anesth* 2021; 71: 110242. <https://doi.org/10.1016/j.jclinane.2021.110242>
4. Kranenburg L, Lambregtse-van den Berg M, Stramrood C. Traumatic childbirth experience and childbirth related post-traumatic stress disorder (PTSD): a contemporary overview. *Int J Environ Res Public Health* 2023; 20: 2775. <https://doi.org/10.3390/ijerph20042775>
5. Manley EL, Rametta L, Blau A. PTSD: anesthesia considerations for the patient with post-traumatic stress disorder. *AANA J* 2022; 90: 359–65.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.