INVESTIGATING THE IMPACT OF POST-OPERATIVE PAIN ON THE DEVELOPMENT OF SYMPTOMS OF POST-TRAUMATIC STRESS DISORDER

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INTRODUCTION / AIM

Individuals that suffer with Post-Traumatic Stress Disorder (PTSD) carry a significant burden of illness with impact on physical, psychological and social functioning. Previous research has identified a high co-occurrence of PTSD and chronic pain. Rates of chronic pain in patients with PTSD are between 30-77% and 10-50% of individuals with chronic pain meet criteria for PTSD. The goal of the proposed research is to better understand the potential link between pain and the development of symptoms of PTSD. To accomplish this goal we are examining the association between the severity of pain following surgical procedures (involving the chest and lung) and the incidence of symptoms of PTSD several months after these interventions. The specific aims of this study are to (1) replicate previous data showing an association between post-operative pain severity and the incidence of PTSD symptoms in individuals that have undergone a surgical operation, (2) to determine if the use of medications that reduce post-operative pain are correlated with a reduction in PTSD symptoms and (3) to identify the traumatic stressors that may have led to any PSTD symptoms.

METHODS

A prospective observational cohort design has been used. 60 participants who underwent a thoracic surgical procedure have been recruited 3-5 days after their surgery and have given permission for the study team to contact them at 6 months to complete validated questionnaires, which included 3 questionnaires; a numerical pain intensity scale (NRS), a PTSD symptom checklist (PCL-S), and a depressive symptoms checklist (PHQ-9). If the PCL-S score is greater than 0, the interviewer will ask a predefined question inquiring about the trauma that may have resulted in the PTSD symptoms. These measures will determine presence of PTSD symptoms, current pain severity, mood symptoms and functional status. This information will then be compared with information gained from the patient’s stay in hospital immediately following their surgical procedure, which includes pre-morbid medical and psychiatric conditions including chronic pain disorders, post-operative pain scores, analgesic medication administration, and baseline demographics.

RESULTS

Our preliminary data suggests that very few individuals (<10%) are experiencing PTSD symptoms 6 months following thoracic surgery. Further, less than 25% of individuals sampled continue to experience pain symptoms 6 months post-operatively. We are in the final data collection phase of our study and will update results and conclusions prior to presentation.
DISCUSSION / CONCLUSIONS

Our preliminary data indicates that in our sample, the incidence of PTSD symptoms is 6% and the incidence of persistent post-surgical pain is 16%. The rate of persistent post surgical pain in this study is also considerably lower than the incidence of 40% that is commonly reported in the literature following thoracic surgical procedures. This may be due to the fact that the majority of individuals in the current study underwent video-assisted thoracoscopic surgery (VATS). VATS is much less invasive and has a lower risk of nerve injury. To our knowledge the incidence of chronic pain following this type of surgery has not yet been reported and the results of this study may support the effectiveness of this procedure in reducing the incidence of persistent post surgical pain.

OTHER AUTHORS

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