

Trauma Setup

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Abstract

Trauma is the leading cause of death for people under 45 years of age and a leading cause of death worldwide making it a massive public health problem (Tobin et al, 2013). As anesthesia providers, we must be equipped to manage trauma cases, as this public health epidemic does not seem to be ending. A good trauma setup is crucial in order to maintain order in the midst of chaos. In order to prevent missing a step in the trauma setup, checklists have proven to be useful. They have been proven to decrease patient morbidity and mortality by assuring a checks and balance system. This capstone project identified the importance of a trauma setup checklist geared toward the anesthesia provider to prevent missing critical steps in the trauma setting.

Learning Objectives

- Determine whether an anesthesia trauma setup checklist is pertinent to practice.
- Emphasis the benefits of a visual aid checklist.
- Improve the knowledge and understanding of a standardized trauma OR setup.

Project Description

- This project was consisted of a thorough review of current literature in the field of anesthesia trauma setup. A comprehensive PowerPoint module was created, which has served as an educational tool for current and future SRNAs. In addition, criteria for a standard setup for a trauma anesthesia case was also presented. The sample size included 22 junior SRNAs.
- A pre-lecture simulated scenario was performed by ten SRNA volunteers to establish baseline knowledge of a trauma anesthesia setup. The remaining students stayed in the classroom watching the simulated scenario developing live of the ten SRNA's performing the lab scenario. After presentation of the learning module content, the lab scenario was performed with the same ten volunteer students, maintaining the same sequence and conditions to evaluate established learning objectives. Ten SRNA volunteers were isolated from the rest of the class; two students participated as anesthesia providers in each group.

Literature Review

- According to Thomassen et al (2014), safety checklists appear to be effective tools for improving patient safety in various clinical settings by strengthening compliance with guidelines, improving human factors, reducing the incidence of adverse events, and decreasing mortality and morbidity.
- A provider's tendency toward shortcuts, especially when faced with an emergency situation, can lead to serious outcomes because critical items or steps may be overlooked. Thus when a standardized setup is implemented it provided guidelines to the anesthesia provider to prevent overlooking essential equipment (Faircloth & Ford, 2013).
- In the article "A Checklist for Trauma and Emergency Anesthesia" checklists have been shown to decrease patient morbidity and mortality by assuring that the health care provider does not overlook some important aspect of care (Tobin et al, 2013).

Checklist



Results & Conclusion

The results were calculated by a statistician. Due to the small sample size, a non-parametric test was employed to analyze the data. Statistical significance was found with a p of 0.039 ($p < 0.05$) signifying a significant increase between the pre-test scores and the post-test scores among the Junior SRNA class. This capstone project identified the significance of a trauma setup checklist geared toward the anesthesia provider to prevent missing critical steps in the trauma setting. The use of checklists that have long been used in aviation and can help us to quickly establish treatment solutions (Ruskin, 2014).