

Question:

Spontaneous awakening trials are becoming widely popular, we ask how can spontaneous awakening trials affect adult patient outcomes and cost to longer hospital stays?

Summary:

The use of spontaneous awakening trails is combined with spontaneous breathing trials for patients who are on the vent. "Spontaneous awakening trial as a period during which sedating medications that are being used to treat an ICU patient are held in order to determine whether the patient requires ongoing sedation or can be managed without sedatives for the near future," (Girard et al.2022). More intensive critical units are moving towards these trials to improve patient outcomes and help patients decrease to only minimal support with mechanical ventilations. Spontaneous breathing trials are also used in conjunctions to "treat an ICU patient is (or decreased to provide only minimal support) to determine whether the patient requires ongoing mechanical ventilation or can possibly breathe successfully without the assistance of a ventilator for the near future," (Girard et al.2022). "The primary diagnosis for adult patients in the ICU involves the respiratory system," (Green.Staffileno.2021) and can affect the patient greater with continuous unneeded sedation and ventilator support. In the ICU, we are moving toward removing sedation and mechanical respiratory support sooner to decrease the patient neurological deficit and decrease the amount of sedation that is used and can cause delirium to patients that stay on longer. Patients' do have to meet criteria when preforming SATs by nurse's screening the patient for any contradictions from weaning a patient from sedation. In SATs safety screening a patient should not have an active seizure, alcohol withdrawal, agitation, paralytics, myocardial ischemia and have normal intracranial pressure. The failure of SAT screening is anxiety, agitation, or pain, respiratory rate >35/min, SpO2 <88%, respiratory distress and acute cardiac arrhythmia. "Prolonged exposure to these medications (sedation) contributes to adverse outcomes such as increased duration of mechanical ventilation, ICU length of stay (LOS), and rate of delirium, nurses play a key role in caring for critically ill patients and improving their outcomes," (Green et al.2021). According to Favorable Outcomes After Implementing a Nurse-Driven Sedation Protocol, that the ABCDEF bundle was to guide nurses with spontaneous awakening protocol by each letter representing an element of care:

- A. Assess and prevent, and manage pain
- B. Spontaneous awakening trials and spontaneous breathing trials
- C. Choice of analgesia and sedation
- D. Assess, prevent, and manage delirium
- E. Early mobility and Exercise
- F. Family Engagement

(Green et al.2021)

This bundle helps to determine when patients are ready to be discontinued from the mechanical ventilation.

Conclusion:

In conclusion to reading articles of research, spontaneous awakening trials are very favorable outcomes to help wean patients from ventilators and sedation medications that affect them while in the hospital. "Spontaneous Awakening trials reduce morbidity and mortality when

paired with spontaneous breathing trials,” (Ketchman et al. 2022). Even now SATs are still being trialed and have not been implemented in hospitals. There are little known and completions rates are low even with some hospitals starting these in their hospitals, some are wanting more evidence of these trials to work. Some are implementing protocols for public use but still do not perform these every day. Hospital stays have lowered with patients who have completed the SATs and increased patient cognitive awareness and decreased delirium in patients who stay on the vent much longer. More research is starting to come into light and evidence is proven that SATs and SBTs are improving patients’ outcomes in a positive direction.

Work Cited:

Primary Article

Girard.T., Hargett.K., Singh.J., Spontaneous Awakening and Breathing Trials. Retrieved September 15th, 2022 from <https://eds.p.ebscohost.com/eds/results?vid=0&sid=b1ecd7ab-c496-4d69-ad6b-f693e09543cc%40redis&bquery=spontaneous%2Bawakening%2Btrial&bdata=JkF1dGhUeXBIPWlwLHNoaWImYXV0aHR5cGU9c3NvJmN1c3RpZD1uczI0NzU3MCZ0eXBIPtAmc2VhcmNoTW9kZT1BbmQmc2I0ZT1lZHMtbGI2ZSszY29wZT1zaXRI>

Secondary Article

Green.S., Staffileno. Beth., Favorable Outcomes After Implementing a Nurse-Driven Sedation Protocol. Retrieved on September 15th, 2022. <https://aacnjournals.org/ccnonline/article-abstract/41/6/29/31619/Favorable-Outcomes-After-Implementing-a-Nurse>

Tertiary Article

Ketchman.Scott., Adie.Sarah., Brummel.Kent., Walker.Emily., Prescott,Hallie., Thomas, Micheal., Implementation of a Nurse-Driven Spontaneous Awakening Trial Protocol in a Cardiac Intensive Care Unit. Retrieved on September 18, 2022. <https://eds.p.ebscohost.com/eds/detail/detail?vid=3&sid=b1ecd7ab-c496-4d69-ad6b-f693e09543cc%40redis&bdata=JkF1dGhUeXBIPWlwLHNoaWImYXV0aHR5cGU9c3NvJmN1c3RpZD1uczI0NzU3MCZzaXRIPWVkcysaXZlJnNjb3BIPXNpdGU%3d#AN=156084845&db=c8h>