

**Title:**

Implementation of an Evidence-Based Protocol for Headache Management in Subarachnoid Hemorrhage Patients

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**Session Title:**

Creative Arts in Nursing Posters

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Evidence-based practice, Headache and Subarachnoid hemorrhage

**References:**

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**Abstract Summary:**

Headache management post-subarachnoid hemorrhage can be challenging due to the inability to use commonly prescribed medications and variations in practice. The literature is lacking in management strategies for this population. This presentation will show how an evidence-based headache protocol can improve headache, decrease rescue medications, and decrease variations in practice.

**Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to state two pharmacological treatments for headache in patients with subarachnoid hemorrhage.	1. Review of literature on available medications for treatment of headache 2. Inclusion and exclusion of medications due to pharmacokinetics
The learner will be able to optimize headache management in the patient with subarachnoid hemorrhage.	1. Review of evidence-based protocol for headache management 2. Review of outcomes utilizing an evidence-based protocol.

Annually, approximately 30,000 people in the United States will experience a ruptured aneurysm with 40% of those cases resulting in death (bafound.org). Of all emergency room visits for a headache, about 1% will be due to a ruptured cerebral aneurysm causing an aneurysmal subarachnoid hemorrhage (aSAH) (bafound.org). A prevailing symptom of a ruptured cerebral aneurysm is “worst headache of life.” A headache remains the chief complaint even after admission. The severity of a headache from aSAH can cause a variety of physiological and psychological effects on the patient leading to poor outcomes. There is a lack of literature regarding headache management strategies in this population. SAH headaches are difficult to manage due to the inability to use commonly prescribed medications and variations in practice due to lack of evidence-based protocols. The use of narcotics can cause an altered mental status and NSAIDS can be associated with further bleeding in this population. Current practice in the neurological critical care unit varies depending on the provider due to lack of evidence-based protocols. This variation in practice can lead to poor headache control and a decrease in patient satisfaction.

An extensive review of the literature on headache management in aSAH and common medications used to treat a headache in this population will be completed. An

evidence-based protocol will be developed and implemented in a large non-for-profit hospital with a dedicated neurocritical care unit based. IRB approval will be obtained and all patients admitted between June 1<sup>st</sup> and August 30<sup>th</sup>, 2017 will be enrolled into the study as long as inclusion criteria are met. Inclusion criteria will include age > 17, the presence of aSAH, conscious and able to answer questions, and Numeric Rating Scale (NRS) >4. Exclusions include the history of craniotomy, NRS <4, poor clinical exam, Age < 18. Historical data from January 2016 to December 2016 will be obtained and compared to the prospective group data. Data collection will include demographics of the population, pain scores using the NRS, medications utilized for pain control and a number of rescue medications needed, the incidence of vasospasm, and whether a ventriculostomy was present. The overall purpose of this study will be to evaluate if an evidence-based headache protocol can improve headaches in this unique population, decrease the number of rescue medications utilized, and decrease variations in practice.