



ARTICLE OF THE MONTH

Neuroanesthesiology Update

It is hard to believe that another month has come and gone. For the June Article of the Month we are departing from our traditional format for the AOTM and Dr. Jeffrey Pasternak is going to let us all in on his process for writing the yearly [Neuroanesthesiology Update](#). The Neuroanesthesia Update has been a yearly feature in the *Journal of Neurosurgical Anesthesiology* since 2004 and is an article I look forward to each year.

Dr. Jeffrey Pasternak completed a Masters Degree in physical chemistry at the University of Michigan and medical school at the University of Medicine and Dentistry of New Jersey. He completed his anesthesiology residency and neuroanesthesiology fellowship at the Mayo Clinic College of Medicine in Rochester, Minnesota. He is currently an Associate Professor of Anesthesiology and Perioperative Medicine at Mayo Clinic where he also serves as the Chair of the Division of Neurosurgical Anesthesiology and the Director of the Neuroanesthesiology Fellowship program. He is also a Past-President of SNACC and the Neuroanesthesia Section Editor for Up-To-Date.

As always, readers are welcome to join us for further discussion of the [Twitter](#) feed or on [Facebook](#).

Amie Hoefnagel, MD, Oana Maties, MD, Shilpa Rao, MD, and Nina Schloemerkerper, MD

Commentary

By Amie Hoefnagel, MD

Neuroanesthesiology Update is a review article that is published annually in the April issue of the *Journal of Neurosurgical Anesthesiology*. The goal of this article has been to provide readers a synopsis and synthesis of the literature from the prior year that is relevant to the peri-procedural care and critical care management of patients with neurological diseases.

Since the publication of the first edition in 2004, writing this article has really brought me a great deal of enjoyment. It has also forced me to not only keep abreast of the literature pertinent to my practice but it helped me learn how to critically assess the medical literature. I had the opportunity to co-author this manuscript with one of the greats in neuroanesthesia – Dr. William Lanier – who really helped me to develop my writing and analytical skills along the way and have now been the solo author for the last two editions.

People have frequently inquired about my annual “process” for identifying articles that will be included as well as how I develop the “story” of the literature. It took me a few years to develop a process that works well. It all starts in January each year when I try to maintain awareness for any potential articles through literature searches related to my clinical or re-

search activities, presentations made by others, discussions with colleagues, and even the news and non-medical media. I will either print out the article or save the electronic reference for later.

Each year in mid-August, I start to perform a very detailed and more systematic review of the literature. I use my institution's electronic library to review the table of contents of multiple journals that may contain potential articles. In addition to anesthesiology journals, I also review journals that publish in the fields of basic neuroscience, neurology, critical care, internal medicine, neurosurgery, spine disorders, and radiology. Preparing the 2020 edition of *Neuroanesthesiology Update* entailed reviewing the table of contents of 74 journals. Any potential article identified during the year and during this more exhaustive search is printed. I tried to do this electronically a few years ago to save paper but found it very difficult to organize the articles. I do use a two-sided printer to try to reduce paper consumption!

It's now late August. I have never counted the number of articles that I have identified at this point but would estimate about 500-600. I sit down on my living room floor and place all of the articles into piles based on specific topics. I then try to combine groups of articles of similar topics in an effort to develop the major headings of *Neuroanesthesiology Update*. Taking all of the articles from one major heading at a time, I more carefully review all abstracts and skim the full manuscript to identify recurring themes, novel and innovative findings, or data that may change practice. This allows me to put the paper articles in an order that would essentially tell a story while discarding the remainder.

I then carefully read each of the remaining articles while taking notes on 4in x 6in Post-It Notes that get attached to each article. Only after I have read all of the articles on a specific subtopic do I actually start writing that section. I have found that this process allows me to better develop a cohesive story and makes it easier for me to compare and contrast findings from different articles, as appropriate. During the period of late August through early December, I am constantly carrying around a stack of articles and Post-It notes.

Each month from September through December, I set aside time to go back and review the table of contents of the journals for any new potential articles that were published in the latter months of the year, print them out, and add them to my stacks of articles. Typically by late November, the first draft is completed (less any articles published in December) and I work on editing text and formalizing any figures and tables. The manuscript gets submitted to the *Journal of Neurosurgical Anesthesiology* by mid-December giving the journal's editor an opportunity to review the content and make suggestions for edits while allowing enough time for preparation for publication in April of the following year.