Reviewer's report

Title: Prospective study of recovery from copperhead snake envenomation

Version: 3 Date: 28 January 2015

Reviewer: Scott A Weinstein

Reviewer's report:

General

The authors have adequately addressed almost all of my concerns. I do have a couple of remaining minor concerns about a few of my initial comments and the authors’ relevant replies (although one of these is simply an exchange of clarification).

This is an interesting and valuable study that is the result of an arduous undertaking. With just a few final minor qualifying edits, the paper will be an important contribution to the envenoming literature.

Reviewer #2 Response to selected authors’ comments

I appreciate the authors’ qualification of my comment re the approximated number of presentations of “venomous” snakebites. I am familiar with the O’Neill et al. info, but I disagree that it is clear that the “vast majority” of “unspecified” species were venomous. Many cases present without any verifiable identification of the purported “venomous” species, and should not be accepted as being inflicted by a venomous species when in fact there is no verification of the likely “suspect”. In addition, there is a very undesirable recent sensationalist trend in both research and clinical toxinology that has muddled the definition of “venomousness”. I have consulted on several cases in which a non-venomous species was termed “venomous” because of a notable and disturbing confusion re the biological definition of venom.

With all of that said for clarification, I do think that the authors provided an acceptable and sensible solution by commenting, “....for evaluation of potentially venomous snakebite”.

Re the following sentence, a suggested edit:

“The vast majority of venomous bites are caused by crotaline snakes (pit vipers: rattlesnakes, cottonmouths, and copperheads).”

As noted in some of my initial comments, it is clear from the sentence, even to those readers unfamiliar with these crotalines, that these are all snakes, and although common names have little utility, the most accurate use for cottonmouth and copperhead does not require “snake” as an additional identifier.

Comment #6 (Discretionary Revision)
The basis for my comment re possible co-morbidities arose from the vague nature of the authors’ comments, “...patients were excluded... if they had a distracting injury or other condition that would limit the ability to make a reliable self-report of functionality status based solely on the condition of interest.”

While I agree it raises the issue, it should have some examples of co-morbidities that the authors encountered in enrolled patients that resulted in their exclusion. A simple list of several examples in the Methods would suffice.

Comment #25 (Discretionary Revision)

The authors seem to have missed the crux of my comment. While I completely agree that there is no other reasonable way for patient-centered reporting of pain, the limitations should be mentioned/cautioned of reporting this highly subjective and personality-influenced symptom. This is a proviso that is commonly included in studies that include pain as a significant part of the presenting complaint.

I will not “press” this point, but as I originally commented, I think it is desirable to caution about the wide spectrum of patient variability in the interpretation and reporting of pain/unpleasant sensations.

Comment #26 (Minor essential revision)

The authors include some interesting information re their evaluation of the patient who reported a “much worse” status on Day #28. It might be desirable to indicate, as a possible tabular footnote, that this patient’s report was (understandably) deemed “anomalous”.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests