

## Author's Response to Letter to the Editor: Cerebral Hemorrhage Following Chiropractic Activator Treatment-Case Report and Review of the Literature

Fred L. Cohen<sup>1,2</sup>

<sup>1</sup> Private Practice of Neurological Surgery, Palm Beach Gardens, Florida, United States

<sup>2</sup>Gary Roberts and Associates, West Palm Beach, Florida, United States

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Liebschner and Ehni, both with impressive credentials and backgrounds, conclude in their Letter to the Editor that the Activator device can be ruled out as a cause of the injury described in detail in the article referenced by them (authored by me and published in this journal).<sup>1</sup> I reviewed the six references they supplied. They are all tangential to what I perceive as the real issue at the heart of their criticism. As with causation in almost all biological systems, the interplay of tissue and environment is so diverse and poorly understood that one cause can virtually never be ruled out (or ruled in for that matter). The dogmatic conclusion reached by these authors underscores the degree to which such a conclusion should never be trusted, let alone relied upon.

In my article, I provided multiple reasons why I reported an association between the Activator device and the clinical illness and picture. This letter to the editor and these authors provide no rationale that in any way weakens the only conclusion that I was logically able to reach: that the treatment and the device were associated with the clinical illness and injury. In fact, I was more than ambivalent regarding attributing any causation to this association, other than to suggest the possibility. Perhaps these authors are rejecting even the possibility of a causation link. That to me is dangerous and concerning.

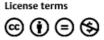
Causation in biological systems is best subjected to a multifactorial analysis relied upon for years, the Bradford–Hill criteria.<sup>2</sup> Temporality is only one of the criteria (there are eight: strength, consistency, specificity, temporality, biological gradient, plausibility, coherence, experiment, and analogy) utilized to help assess or attribute causation. Several of the Bradford–Hill criteria have limited applicability to the facts and circumstances of this case. Among the factors, underlying Liebschner and Ehni's ostensible criticism is "biological gradient." "Strength," however, to my mind is the weakest link in a Address for correspondence Fred L. Cohen, MD, JD Gary Roberts and Associates, 580 Village Boulevard, Suite 300, West Palm Beach, FL 33409, United States (e-mail: vannefred@aol.com).

causation chain between Activator treatment and injury in this case. It is exactly the rarity of this association (the first reported case) in which its importance lies and should be viewed. To adopt the conclusion of Liebschner and Ehni is to eliminate even the possibility that the Activator is and has been responsible for many more complications than have even been reported or seen the light of day, or ever will. This reasoning will insulate the Activator and similar devices from any future or subsequent criticism or similar analysis.

Of the two authors, the reader should be aware that Liebschner is neither a neurosurgeon nor a clinical doctor. He is a Ph.D. working in the neurosurgery department, albeit with strong biomechanical credentials and background. Also, he holds a patent<sup>3</sup> with Dr. Arlan Fuhr, developer of the Activator device and president of the commercial enterprise that manufactures and/or markets the device he is defending. This hardly makes him an impartial critic or provides the most ethical platform from which to dogmatically eliminate the Activator from consideration as a cause of injury in this case. Dr. Leibshner's work is promoted in a commercial marketing publication for the Activator device.<sup>4</sup> (Incidentally, Dr. Fuhr called me personally after the publication of my case report, asking for information about the case that privacy and HIPPA [Health Insurance Portability and Accountability Act of 1996] laws prevented me from disclosing, even if I had wished to do so). (Dr. Fuhr, oral communication, January 2017).

Dr. Ehni, also eminently qualified by education and training and, also, a practicing neurosurgeon should be equally wary of introducing dogma into a causation analysis or conclusion. His learned causation opinion in the legal case of Babino v Peoplease Corp. and Arch Insurance Company (South Dakota Department of Labor & Regulation, Division of Labor and Management)<sup>5</sup> was "discounted" by an administrative law judge who heard and

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read all of the evidence, including Dr. Ehni's causation opinion. In her published opinion, after considering all of the evidence and opposing causation opinions expressed by the experts, she concludes that "Dr. Strand's opinion is seen as more persuasive than Dr. Ehni's" (p. 10) and that "Dr. Strand's opinion was more convincing than the opinion of Dr. Ehni" (p. 11). She appears to reject Dr. Ehni's causation opinions in reaching her conclusions of law.

Finally, the reader should know that Drs. Ehni and Leibschner are either partners or in some other way associated with an organization called BioInnovations.Org,<sup>6</sup> whose stated purpose is in developing innovative diagnosis and treatment technology, but whose corporate structure could not be determined. It appears to be charitable or, at least, nonprofit.

None of this is intended to diminish the content of Leibschner's and Enhi's knowledge or analysis of my article. Rather it is intended to allow the reader to objectively evaluate what stake or perspective each author and contributor brings to the discussion.

I submit that nothing about this letter to the editor in any way weakens anything in the case report nor a single conclusion that it was able to reach. It should be simply encouragement to me and the reader to pursue additional cases in which the Activator instrument "can be ruled out as a cause of...injury by virtue of an engineering approach to its energy output and injury mechanism."

## References

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