MedCrave
Step into the World of Research
International Journal of Complementary & Alternative Medicine

Opinion

Open Access
CrossMark

Reduction of pathogenic load in overwhelming viremia

Volume 3 Issue 6 - 2016

Franklin David Nash
Center for Scientific Analysis of Policy, LLC, USA

Correspondence: Franklin David Nash, Principal, Center for Scientific Analysis of Policy, LLC, 7500 Hoover Road, Indianapolis, Tel 844.870.7870, Email docnash@spipolicy.org

Received: May 27, 2016 | **Published:** June 28, 2016

Opinion

I am a retired professor of medicine, physiology, and biophysics who specialized in nephrology, one of whose therapeutic modalities is hemodialysis, life sustaining in people with end-stage renal disease (ESRD). Less frequently, dialysis is used for removal from the blood of toxic substances that have gained entry and are circulating; my first use of a dialyzer for this purpose was in 1967 for a man who had overdosed on a fat-soluble sleeping medication.

But first, I want to transition to the growing problem of antibiotic resistance. Recently, The Atlantic magazine carried a story entitled, "The Plan to Avert Our Post-Antibiotic Apocalypse," which begins with a chilling statement, "A new report estimates that by 2050, drug-resistant infections will kill one person every three seconds, unless the world's governments take drastic steps now." As more pathogenic organisms develop means to defeat the effects of pharmaceutical (and natural) agents, our attempts to get the better of them will fail despite the steps detailed in that plan.

In considering the probability of a future manifested by epidemics, even pandemics, involving pathogens for which there are neither preventative measures nor effective treatment, we must consider all possible means of dealing with them. Is there another way to combat them besides developing agents that inactivate and/or kill the infesting pathogen but may also result in morbidity or mortality of the recipient? Face it, when there are millions of millions of pathogenic organisms in the circulating blood stream, overwhelming the immune system's ability to combat them, what other options to we have? Is there a means of reducing the pathogenic load in the circulation that is not pharmacological but is physiological?

I am writing to report a new and developing therapeutic modality that has successfully removed pathogens from the circulation of infected individuals in clinical research studies in India. Viruses that have been removed there and elsewhere include HIV, Ebola, and now hepatitis C (HCV). The reduction of the viral load is not claimed to be therapeutically complete, but to be sufficient to allow the previously overwhelmed immune system and adjuvant therapy to remove the remainder.

I became aware of this four years ago when a major benefactor asked me to look at Aethlon Medical, Inc. from the scientific standpoint and give him my opinion of the science and the clinical prospects of one of its products, the Hemopurifier®, a device designed to be inserted into a standard hemodialysis system circuit with the intention of selectively removing pathogens from the blood flowing through it.

The best introduction to the Hemopurifier® comes from James Joyce, PhD, the President of Aethlon: "The Aethlon Hemopurifier® is a first-in-class bio-filtration device that targets the rapid elimination of viruses and immunosuppressive proteins from the circulatory system of infected individuals. The device is a leading broad-spectrum treatment countermeasure against viral pathogens that are not treatable with drug or vaccine therapies. In HCV care, the device is positioned to address antiviral drug resistance and hard-to-treat patients who are unable to tolerate normally administered doses of antiviral drugs or peginterferon+ribavirin (PR) therapy. It is estimated that approximately 170million people worldwide are infected with HCV, which leads to chronic liver disease or cirrhosis, and is a leading cause of liver transplantation".[1]

In both in vitro and in vivo studies, the Hemopurifier® has been shown to remove bacteria, viruses, and other blood-born pathogenic substances.

An early study on patients with end-stage renal disease receiving hemodialysis treatment at the Fortis Hospital in Delhi, India[2] showed that the addition of the Hemopurifier® to the dialysis circuit produced no adverse effects and inhibited the progression of HIV.

Subsequent results from the hepatitis C study conducted at the Medanta Medicity Institute in India have been reported as well.[3] They demonstrated that the Hemopurifier® can be administered safely to patients who had normal renal function, were not chronic dialysis patients, but had been infected with HCV. The process was effectively combined with an established drug protocol and resulted in enhanced diminution of the viral load, with the Hemopurifier® capturing as many as 300billion viral particles during one six-hour dialysis run.

There is currently an FDA approved clinical research study that is being conducted at DaVita Medical Center Dialysis, Houston, Texas. The study was initiated in December 2014 with the primary completion date scheduled as February 2017. The study's title: A Clinical Safety Study of the Athlon Hemopurifier® in Chronic ESRD Patients with HCV Infection.

There has been limited approval for use of the Hemopurifier® in the U.S. against viruses for which there are no effective therapy or prevention, the classic one being Ebola. With the conclusion of the current studies against AIDS, there is hope that the FDA will loosen the restriction on the use of the Hemopurifier® for AIDS, HCV, and Zika.

Submit Manuscript | http://medcraveonline.com

©2016 Nash. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and build upon your work non-commercially.

Copyright: ©2016 Nash

Acknowledgments

None.

Conflicts of interest

Author declares there are no conflicts of interest.

Funding

None.

References

1. http://aethlonmedical.investorroom.com/2014-12-02-Aethlon-Medical-Reports-Rapid-and-Sustained-Virologic-Response-Rates-in-Hepatitis-C-HCV-Treated-Patients
2. http://www.pharmaceutical-businessreview.com/news/0148aaethlon_medical_completes_hepatitisc_treatment_
3. http://vaccinenewsdaily.com/stories/510356674-aethlon-reports-positive-results-in-hepatitis-c-study