Response to "Can Plasmapheresis Filter Out Microplastics From the Blood?"

The recent *Men's Health* article on plasmapheresis raises important concerns, but its framing risks oversimplifying a well-established medical therapy in ways that may mislead readers.

Plasmapheresis, or therapeutic plasma exchange (TPE), is *not* a wellness trend. It is a decades-old, guideline-supported intervention used in the management of serious medical conditions, including neurologic, hematologic, renal, and autoimmune diseases. Its role in these settings is clearly defined in clinical practice guidelines, including those from the American Society for Apheresis. Framing it primarily through the lens of influencer-driven experimentation obscures this reality and shifts the discussion away from where it should be, that of appropriate use, appropriate patients, and appropriate expectations.

Public interest in plasmapheresis has been amplified by high-profile individuals, and while that visibility may drive curiosity, it should not define the conversation. The central issue is not whether the therapy is legitimate, but *how it is being applied* outside of current established medical indications.

The article states that there is "no evidence" to support the use of plasmapheresis for toxin removal. That phrasing is overly broad and risks conflating the absence of clinical outcome data with the absence of biologic effect. The mechanism of TPE is well established: it removes a portion of the patient's plasma along with everything the plasma carries, including proteins, antibodies, and other factors. It is therefore plausible that circulating substances such as environmental toxins can be reduced through this process. Early observational work has explored whether plasma exchange can reduce measurable levels of synthetic chemicals, such as environmental toxins. These studies are preliminary, limited by design, and do not establish clinical benefit. Claims regarding "detoxification," disease prevention, or improved longevity are not supported by current evidence and should be approached with caution.

At the same time, concerns about risk are appropriate and should not be minimized. Plasmapheresis is a medical procedure, and not a benign intervention. It carries meaningful risks, including hemodynamic instability, bleeding, and alterations in immune function due to the removal of clotting factors and antibodies.

Plasmapheresis is time-intensive and costly.

Use of plasmapheresis outside established medical indications should be approached cautiously and grounded in a clear understanding of these trade-offs. Performed in this way, by qualified physicians, trained and experienced in the use of plasmapheresis, with patient safety always in focus.

Where the article is most accurate is in its implicit warning against oversimplified narratives. Describing plasmapheresis as a "detox" or an "oil change" for the blood is scientifically imprecise and misleading. At the same time, reducing a long-standing, evidence-based medical

therapy to a “wellness trend” because of its portrayal in popular media introduces a different kind of negative distortion.

A more productive discussion requires separating three distinct domains: established medical use, emerging and investigational applications, and commercial or cultural reinterpretations. Combining these categories into a single entity leads to confusion for patients and the public.

Plasmapheresis is neither a miracle intervention nor a fringe concept. It is a powerful medical tool with clearly defined roles, emerging areas of scientific interest and use, and important limitations.

Sincerely,

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