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Exploring TPE and IVIG in Long COVID, EBV, and Tick-Borne Illness

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December 21, 2025 · Updated January 2, 2026

New therapies including Therapeutic Plasma Exchange and IVIG are showing promise in Long COVID, Epstein Barr Syndrome, lyme disease and tick-borne.

Post-Infectious Syndrome Leads to Complex Illness

Viral infectious such as Epstein–Barr (EBV), COVID-19, and tick-borne infections don't always leave quietly. For some people, symptoms linger long after the initial illness has passed, leading to complex illness. Fatigue, brain fog, nerve pain, shortness of breath, or a sense that the body never fully returned to balance can become part of daily life.

Research increasingly suggests that in many of these cases, symptoms are not driven by ongoing infection, but by an immune system that remains stuck in an activated state. When this happens, the immune, nervous, and vascular systems can become dysregulated, leading to persistent inflammation and ongoing symptoms even after standard antimicrobial treatments have been completed.

People living with post-infection syndrome such as chronic EBV, Long COVID, Lyme disease (Borrelia), Babesia, or Bartonella, often describe a similar pattern: lingering fatigue and cognitive changes, ongoing pain or neurologic symptoms, and a feeling that their body is no longer responding the way it once did. Studies show that these infections can disrupt normal immune signaling, increase inflammation, affect blood vessels and nerves, and in some individuals trigger post-infectious autoimmune or inflammatory responses. In short, the body may continue reacting long after the original trigger has passed.

An Integrative Perspective on Treatment

When symptoms and immune dysregulation do not improve with appropriate antimicrobial care alone, clinicians may consider therapies that focus on restoring immune balance rather than targeting infection directly. Two such therapies are **Therapeutic Plasma Exchange (TPE)** and **Intravenous**

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Immunoglobulin (IVIG).

What is Therapeutic Plasma Exchange?

Therapeutic Plasma Exchange is a procedure that removes plasma from the blood, where inflammatory proteins, immune complexes, and autoantibodies can accumulate. The blood cells are returned to the body, and the plasma is replaced with albumin or a substitute solution. TPE does not kill bacteria, viruses, or parasites. Instead, its role is to reduce harmful immune activity, which may help improve symptoms such as brain fog, fatigue, neurological changes, shortness of breath, and microclotting. Strong evidence supports its use in severe babesiosis, and growing evidence suggests a potential role in immune-mediated complications following Lyme disease, Bartonella, EBV, and Long COVID.

What is IVIG Therapy?

IVIG works differently. It is a sterile infusion of purified antibodies collected from healthy donors and is used to support or rebalance the immune system. IVIG can calm autoimmune reactions, regulate inflammation, and support nerve and immune function. It is commonly used in autoimmune neurologic conditions such as CIDP, dysautonomia (including POTS-like syndromes), post-COVID complications, and other immune-mediated disorders that may be triggered by infections like Lyme disease or viral illness.

In simple terms, TPE removes harmful immune substances, while IVIG replenishes healthy immune signals. In select, complex cases, one or both therapies may be used together, depending on the underlying immune imbalance.

Root Cause, Whole-Person Care

At Holistique, chronic post-infectious illness is approached with thoughtful, root cause, integrative care. The focus is not only on addressing infections, but also on supporting immune balance, neurologic and vascular health, and overall resilience. Therapeutic Plasma Exchange is provided by Circulate Health. TPE and IVIG are considered only when appropriate and always as part of a broader, individualized care plan.

These therapies are not cures, and they do not replace antibiotics, antivirals, or other antimicrobial treatments. Not every patient is a candidate. They are reserved for carefully selected cases where immune-driven processes are clearly contributing to ongoing symptoms.

A Special Duo: TPE + IVIG

For a small group of people living with chronic or post-infectious illness, symptoms may be driven less by persistent infection and more by ongoing immune dysfunction. In these situations, therapies such as Therapeutic Plasma Exchange and IVIG may offer meaningful support, helping reduce inflammation and allow the body to move toward recovery.

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*If you'd like to explore whether these approaches may be appropriate for you, the team at **Holistique** is here to help. To schedule a consultation, please text or call **(425) 451-0404**.*

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