

Could Neuroinflammation Distort the Sense of Self?

Absurd Health Institute · Hypothesis and mechanistic perspective

Central hypothesis

Depersonalization and dissociation are often discussed psychologically. Here the question is whether changes in inflammatory signaling, sleep and interoceptive network function can sometimes change the quality of embodied self-experience. This is a mechanistic hypothesis, not a claim that inflammatory biomarkers diagnose dissociative illness.

The biological route

Cytokine activity can affect sleep, motivation and neural signaling; astrocytes modulate excitatory synapses; and interoceptive processing contributes to the brain's model of bodily state. A combined disturbance might alter the integration of bodily sensations, memory, emotion and agency. Severe autoimmune encephalitis or delirium demonstrate medical causes of altered self and awareness, but they are not direct models of ordinary depersonalization.

An illustrative scenario

A person reporting depersonalization after sleep deprivation might experience symptom relief with restored sleep without any immune intervention. Another patient with fever, seizures, disorientation and rapidly evolving behavioral change needs medical assessment for encephalitis or other acute conditions. The proposed neuroimmune model should not merge these distinct presentations simply because both involve altered consciousness or self-experience.

Alternative explanations and limits

Trauma history, panic, migraine, epilepsy, drug effects, sleep deprivation and primary dissociative disorders remain crucial alternatives. Inflammatory markers are nonspecific and may be elevated because of unrelated obesity, infection or stress. The presence of inflammation would not establish direction of causality.

What would change the conclusion?

The hypothesis needs prospective coupling of inflammatory changes with validated dissociation measures and independent neural or interoceptive markers, controlling for sleep and medication exposure. If the symptoms persist without any measurable immune change, the claim should narrow to selected subgroups.

The distinctive prediction

A biologically specific subgroup would require convergent evidence in immune measures, interoceptive processing and dissociative symptoms, not merely elevated C-reactive protein. Strong associations with sleep or trauma alone would favor narrower explanations.

Clinical interpretation

Clinical interpretation should remain respectful of lived experience, avoid simplistic immune treatments, and prioritize urgent assessment for acute confusion, seizures, fever or focal neurological symptoms.

Selected scientific reading

Contextual background, not direct validation of the proposed hypothesis.

Astrocyte regulation of synaptic signaling in psychiatric disorders. *Front Mol Neurosci*. 2022.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC9700696/>

Seth AK, Critchley HD. Extending predictive processing to the body: emotion as interoceptive inference. *Behav Brain Sci*. 2013.
<https://www.cambridge.org/core/journals/behavioral-and-brain-sciences/article/abs/extending-predictive-processing-to-the-body-emotion-as-interoceptive-inference/A53E081B5EEBD7CF7658F3D484714AFE>

Editorial note: Original theoretical perspective, not an original clinical study, validated diagnosis, or treatment protocol.