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*“Characterization of cognitive dysfunction in Sjögren’s syndrome patients”*

**LAY ABSTRACT:**

Imagine having a commonly occurring, serious illness that interferes with everything from breathing and eating, to thinking and daily functioning, is under-recognized, under-diagnosed and only beginning to be understood. This is the case for the one American in seventy who has Sjögren’s syndrome, the second most common autoimmune disease, which occurs more frequently than multiple sclerosis and lupus. Although often dismissed as “it’s all in your head,” researchers in Boston believe these difficulties, including paying attention, remembering things and “thinking,” are very real and have a grant to define the problems and recommend approaches for treatment.

**SCIENTIFIC ABSTRACT AND RESEARCH PROPOSAL:**

It is estimated that one American in seventy has Sjögren’s syndrome, making it the second most common autoimmune disease, and one that occurs more frequently than multiple sclerosis and lupus. Best known for its impact on the exocrine or moisture-producing glands, Sjögren’s syndrome can affect any body organ or system. A chronic illness without a cure, treatments tend to be symptomatic or palliative. One challenging aspect of the disorder for patients is a cluster of complaints about cognitive and emotional symptoms that may include fatigue, depression, anxiety, sleep disturbances, and difficulties with attention, concentration, memory and learning. Patients who experience these problems, often termed “brain fog,” are aware of their difficulties and recognize the significance of the deficits. Clinical experience suggests that cognitive dysfunction in Sjögren’s syndrome exists apart from problems with depression, anxiety and fatigue.

We propose to conduct a collaborative, interdisciplinary, research project designed to obtain objective, quantitative measures of the cognitive correlates of Sjögren’s syndrome and to delineate and distinguish the various components involved: attention; concentration/focus; memory; processing/new learning; recall and executive function. We will evaluate cognition in the context of its relationship to sleep (quality and quantity), depression (diagnosed/treated and undiagnosed/untreated), and fatigue (diagnosed/treated and undiagnosed/untreated) through clinical evaluation, self-evaluation and selected active tests of cognition. Our research team brings together four different disciplines, enabling us to conduct a multi-faceted study, and to explore a wide range of contributing domains. Our goal is to clarify the cognitive deficits and to develop treatment hypotheses.