Why do Symptoms Persist?

Brian A. Fallon, MD, MPH. Dr. Fallon is director of the Lyme & Tick-borne Diseases Research Center at Columbia University Medical Center where he leads a team focused on biomarkers, diagnostics and treatment of chronic Lyme symptoms. His team’s recent work has included the testing of novel diagnostic assays in a large community study, with the net result of the identification of a more sensitive Lyme Western blot. His team’s work on Lyme encephalopathy led to the discovery of hundreds of unique proteins present in the CSF of Lyme patients but not in the CSF of patients with chronic fatigue syndrome or healthy controls. His team’s current focus is on clarifying the immunologic profile and neural circuitry of patients with persistent symptoms. His team is also investigating the CNS metabolic effects of intravenous ceftriaxone using MR Spectroscopy to probe glutamatergic transmission. Dr. Dwork in his Center is examining the neuropathologic findings in post-mortem studies of patients with chronic Lyme symptoms. Dr. Moeller in his Center is examining the interaction between peripheral immunologic markers, central immune markers, and brain neurocircuitry among patients with chronic symptoms with the goal of
identifying of biomarkers to help guide treatment recommendations.

Dr. Fallon serves on the editorial and review board of three journals, has lectured and published widely, and most recently has led an international team for the American Psychiatric Association’s revision of DSM-5 to clarify the prevalence of illness anxiety in the general population.

Conference Lecture Summary

Persistent symptoms after a course of antibiotic therapy can cause considerable distress, functional impairment, and controversy between patients and doctors and between doctors themselves. This talk will review the evidence in support of several potential causes of symptom persistence: persistent infection, tissue damage from prior infection, altered immune activation, altered brain neural networks, altered microbiome, unrecognized other diagnoses.