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Isabel Hernandez is an undergraduate student at Barnard College pursuing a degree in chemistry. She has been a part of the team at the Columbia Lyme and Tick-Borne Diseases Research Center for two years. As a part of Barnard’s Summer Research Institute, Isabel spent her summer working on a project studying the symptom burden of patients with Post-Treatment Lyme Disease experiencing sensory sensitivity.

Poster Abstract: Symptom Burden of Post-Treatment Lyme Disease Patient with and without Sensory Sensitivity

Patients with Post Treatment Lyme Disease (PTLDS) typically experience fatigue, pain, and cognitive dysfunction. In addition, some patients have reported an increased sensitivity to normal stimuli (such as light, sound, taste, touch, or smell) that can be extremely severe and debilitating. The aim of this study was to identify a preliminary clinical profile of participants with PTLDS with sensory sensitivity (SS), by comparing PTLDS participants with and without SS and healthy controls on a range of clinical measures. Seventy-five participants (PTLDS with SS, n=34; PTLDS without SS, n=19; healthy controls, n=22) completed self-report questionnaires assessing depression, anxiety, fatigue, multi-system symptom burden, and disability. ANOVAs with Tukey’s post-hoc tests were conducted to examine between group differences. Results indicated significant differences between the PTLDS subgroups and healthy controls on all measures (all p values <.05). There were also significant differences between the PTLDS subgroup with SS and the PTLDS subgroup without SS on measures of multi-system symptom burden (p<.001) and depression (p<.05). All other comparisons were not significant. Results suggest that PTLDS patients with SS may be more likely to experience other neurologic symptoms that were captured within the multi-system symptom questionnaire, in addition to experiencing greater depressive symptoms. These findings offer insight into the symptom profile of PTLDS patients with sensory sensitivity.