Collaborative Miller School Study Links Chronic Itch to Multiple Sclerosis

A groundbreaking collaborative Miller School of Medicine study has found that chronic itch (pruritus) is a common symptom in multiple sclerosis (MS). In fact, 35% of MS patients who participated in the study reported a high level of pruritus in the extremities, face, and scalp that may be the result of changes in brain tissue.

“Prior to this study, little has been known about the prevalence of itch in MS patients,” said Gil Yosipovitch, M.D., professor, Stiefel Chair in Medical Dermatology, and director of the Miami Itch Center at the Dr. Phillip Frost Department of Dermatology and Cutaneous Surgery. “We hope these important findings will help clinicians striving to improve the quality of life for their MS patients.”
First author Giuseppe Ingrasci, M.D., and senior author Gil Yosipovitch, M.D.

Dr. Yosipovitch was senior author of the study, “Chronic Pruritus in Multiple Sclerosis and Clinical Correlates,” published recently in the Journal of the European Academy of Dermatology and Venereology (JEADV).

First author Giuseppe Ingrasci, M.D., preliminary resident physician, University of Miami at Holy Cross, launched the study as a medical student, attending neurology clinics at the Miller School’s Multiple Sclerosis Center of Excellence.

“With support from our neurology colleagues, we gathered patient data and analyzed brain imaging results,” Dr. Ingrasci said. “Our findings indicate that chronic pruritus — itch lasting more than six weeks — is a neuropathic issue that may be related to lesions in the spinal cord or brain stem.”

Important but Often Overlooked Symptom

Twenty-seven of the 77 MS patients (35%) who participated in the three-month 2021 study reported chronic pruritus and completed Standardized Itch Questionnaire and Itch Quality of Life forms. (Patients with any medical conditions associated with chronic itch were excluded.) Itch patients reported more fatigue, heat sensitivity, cognitive impairment, and depression or anxiety than MS patients without itch.
"Itch is a very important and yet often overlooked neurological symptom," said coauthor Andrew D. Brown, M.D., assistant professor of clinical neurology and chief of the General Neurology Division. "This study allowed us to demonstrate how a collaborative effort across subspecialties can truly help in the care of our mutual patients. Hopefully this will lead to many more such efforts in the future."

Other co-authors were Leticia Tornes M.D., associate professor of clinical neurology; Silvia Delgado, M.D., associate professor of clinical neurology; Jeffrey Hernandez, D.N.P., A.P.R.N.; and Qai Ven Yap, B.S., Department of Biostatistics, Yong Loo Lin School of Medicine, Singapore.
Co-author  Leticia Tornes, M.D.

“Working with our dermatology colleagues allowed us to better recognize itch in our MS patients,” said Dr. Tornes. “I am hopeful that this will lead to more research into the treatment of this bothersome symptom.”

Dr. Yosipovitch noted that MS patients who complain of itch without a rash are typically treated with steroids and topical creams, with mixed results.

“Chronic pruritus has been shown to have a negative quality-of-life impact on patients comparable to that of chronic pain and depression,” he said. “This collaborative study may help point the way to new potential therapies in the future.”

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