

Journal of MULTIPLE SCLEROSIS Research

- ISO as a Predictor of Cognitive Impaiment in NMO Unal et al.
- Avascular Necrosis in Patients with Demyelinating Diseases Karaman et al.
- Walking Capacity in Persons with Early MS 13 Abasiyanik et al.
- Response to Relapse Treatment 18 Dogan and Calak
- SLE and Secondary Sjögren's Syndrome After 23 Alemtuzumab in MS
 - Gungor Dogan et al.
- Evaluation of an Individual with Multiple 26 **Sclerosis and Hemiatrophy** Sekercan et al.
- Cervicogenic Headache in NMO and 30 Migraine Coexistence Piset and Gozubatik Celik

RIRITOTHER



Douglas McAlpiné





Editor in Chief

Serkan Ozakbas

Dokuz Eylul University Hospital, Clinic of Neurology, Izmir, Turkiye 0000-0003-2140-4103 serkan.ozakbas@gmail.com

Assistants Editors

Childhood CNS Demyelinating Diseases

Banu Anlar

Hacettepe University Faculty of Medicine, Department of Child Health and Diseases, Division of Pediatric 0000-0001-6727-6229 banlar@hacettepe.edu.tr

Bilge Piri Cinar

Zonguldak Bulent Ecevit University Faculty of Medicine, Department of Neurology, Zonguldak, Turkiye 0000-0002-4884-0717 bilge.cinarpiri@gmail.com

Clinical Overview

Yesim Beckmann

Izmir Katip Celebi University Faculty of Medicine, Department of Neurology, Izmir, Turkiye 0000-0001-5158-8834 ybeckmann@gmail.com

Cognition

Bilge Piri Cinar

Zonguldak Bulent Ecevit University Faculty of Medicine, Department of Neurology, Zonguldak, Turkiye 0000-0002-4884-0717 bilge.cinarpiri@gmail.com

Emre Bora

Dokuz Eylul University Hospital, Department of Psychiatry, Izmir, Turkiye 0000-0002-1598-6832 emre.bora@deu.edu.tr.

Imaging

Cavit Boz

Karadeniz Technical University Faculty of Medicine, Department of Neurology, Trabzon, Turkiye 0000-0003-0956-3304 cavitb@yahoo.com

Rahsan Gocmen

Cukurova University Faculty of Medicine, Department of Radiology, Adana, Turkiye 0000-0002-0223-9336 gocmentr@yahoo.com

Neuroimmunology

Asli Tuncer

Hacettepe University Faculty of Medicine, Department of Neurology, Ankara, Turkiye 0000-0001-9449-4483 maslituncer@gmail.com

Erdem Tuzun

Istanbul University Faculty of Medicine, Department of Neurology, Istanbul, Turkiye 0000-0002-4483-0394 drerdem@yahoo.com

Rehabilitation

Alon Kalron

School of Health Professions, Sackler Faculty of Medicine and Sagol School Department of Physical Therapy, of Neuroscience, Tel Aviv, Israel 0000-0001-7999-0868 alonkalr@post.tau.ac.il

Ozge Ertekin

Dokuz Eylul University School of Physical Therapy and Rehabilitation, Department of Neurological Physiotherapy-Rehabilitation, Izmir, Turkiye 0000-0001-9935-0673 ozge28altin@hotmail.com

Research Design and Data Analytics

Mehmet Berktas

Blue Idea Consulting, London United Kingdom

Statistics Editorial

Mehmet Berktas

Please refer to the journal's webpage (https://jmsres.com/) for "Ethical Policy" and "Instructions to Authors".

The editorial and publication process of the Journal of Multiple Sclerosis Research are shaped in accordance with the guidelines of the ICMJE, WAME, CSE, COPE, EASE, and NISO. The journal is in conformity with the Principles of Transparency and Best Practice in Scholarly Publishing. Journal of Multiple Sclerosis Research is indexed in **J-Gate, Embase, Türk Medline, EBSCO Host** and **Gale**.

The journal is published online.

Owner: Multiple Sclerosis Research Association

Responsible Manager: Serkan Ozakbas

galenos

Publisher Contact

Address: Molla Gürani Mah. Kaçamak Sk. No: 21/1

34093 İstanbul, Turkiye

Phone: +90 (530) 177 30 97 / +90 (539) 307 32 03 E-mail: info@galenos.com.tr/yayin@galenos.com.tr

Web: www.galenos.com.tr

Publisher Certificate Number: 14521

Online Publication Date: May 2025

E-ISSN: 2791-7851

International scientific journal published triannual.





CONTENTS

LETTER to the EDITOR

The Future of Multiple Sclerosis Research: Unlocking Myelin Repair Through Unified Efforts Armelle Rancillac; Paris, France

RESEARCH ARTICLES

- 3 Can the Age of the First Symptom of Neuromyelitis Optica be Used to Predict Cognitive Impairment? Gozde Deniz Unal, Said Alizada, Irem Kara, Can Calıskan, Ulvi Samadzade, Ela Simay Zengin; Izmir, Turkiye
- Steroid-induced Avascular Necrosis in Patients with Demyelinating Diseases: A Single-center Experience Bedriye Karaman, Gulcan Nesem Baskan, Ozgul Ekmekci, Nur Yuceyar; Izmir, Turkiye
- Tracking Walking Capacity in People with Multiple Sclerosis Without Disability: 3-year Follow-up of Objective and Subjective Gait Measures

 Zuhal Abasiyanik, Cavid Baba, Pinar Yigit, Ulvi Samadzade, Turhan Kahraman; Izmir, Turkiye
- Evaluation of Response to Relapse Treatment in Multiple Sclerosis According to Relapse Characteristics Hasan Dogan, Suheda Calak; Samsun, Turkiye

CASE REPORT

- Systemic Lupus Erythematosus and Secondary Sjögren's Syndrome Following Treatment with Alemtuzumab for Multiple Sclerosis: Case Report

 Ipek Gungor Dogan, Seda Kutlug Agackiran, Beril Tasdelen, Damla Cetinkaya Tezer, Serkan Demir; Istanbul, Turkiye
- Evaluation of an Individual with Multiple Sclerosis and Hemiatrophy in Terms of Muscle Strength, Balance, and Quality of Life: A Case Report

 Gizem Sekercan, Hanife Abakay, Mehmet Fatih Yetkin; Kocaeli, Kayseri, Turkiye
- 30 Two Rare Coexisting Diseases and an Uncommon Presentation: Migraine, and Neuromyelitis Optica Presented with Cervicogenic Headache A Case Report

Berkcan Piset, Rabia Gokcen Gozubatik Celik; Istanbul, Turkiye