

SEPTINTOJI TARPTAUTINĖ KONFERENCIJA

THE 7th INTERNATIONAL CONFERENCE

2026 m. liepos mėn. 7-10 d., Vilniaus universitetas, LIETUVA

7th-10th of July, 2026, Vilnius University, LITHUANIA

**EVOLIUCINĖ MEDICINA:
ŽMOGAUS RAIDOS PERSPEKTYVOS IR SVEIKATA
BESIKEIČIANČIOJE APLINKOJE**

**EVOLUTIONARY MEDICINE:
PERSPECTIVES ON HUMAN DEVELOPMENT AND HEALTH
CONSEQUENCES IN A CHANGING ENVIRONMENT**

Rengėjas:

Vilniaus universiteto Medicinos ir sveikatos mokslų
Doktorantūros mokykla, VU Medicinos fakultetas

Organized by

the Doctoral School of Medicine and Health sciences
at Vilnius University, VU Faculty of Medicine

INTERNATIONAL SCIENTIFIC COMMITTEE

Karolis AŽUKAITIS (Vilnius University, Lithuania)
Noël CAMERON (Loughborough University, UK)
Janet CARTON (University College Dublin, Ireland)
Dalius JATUŽIS (Vilnius University, Lithuania)
Maria KACZMAREK (Adam Mickiewicz University, Poland)
Sylvia KIRCHENGAST (University of Vienna, Austria)
Lawrence M. SCHELL (University at Albany, S.U.N.Y, USA)
Wojciech ŚLUSARCZYK (Nicolaus Copernicus University in Torun, Poland)
Janina TUTKUVIENĖ (Vilnius University, Lithuania)
Aistis ŽALNORA (Vilnius University, Lithuania)

LOCAL ORGANIZING COMMITTEE

(Faculty of Medicine, Vilnius University)

Chair:

Janina TUTKUVIENĖ

Conference booklet coordinator:

Rūta MORKŪNIENĖ

Conference Secretary:

Eglė Marija JAKIMAVIČIENĖ

Members:

Justina ALČAUSKAITĖ
Arūnas BARKUS
Elvin Francišek BOGDZEVIČ
Ramunė ČEPULIENĖ
Airida DOSINAITĖ
Rasa JANULIONIENĖ
Kristupas KURMINAS
Rūta MORKŪNIENĖ
Laura NEDZINSKIENĖ
Juozapas RYLIŠKIS
Evita ŠEIKOVAITĖ
Mindaugas SMETANINAS
Eglė STUKAITĖ-RUIBIENĖ
Sofija ŠESTAK
Renata ŠIMKŪNAITĖ-RIZGELIENĖ
Rūta VOSYLIŪTĖ
Violeta ŽALGEVIČIENĖ

EPILEPSY IN MULTIPLE SCLEROSIS: FREQUENCY, CLINICAL CHARACTERISTICS, AND POSSIBLE DISEASE ASSOCIATION IN A SINGLE-CENTRE COHORT

Laura REKUTE¹, Veronika SHKARUPA¹, Natasa GIEDRAITIENE², Rasa KIZLAITIENE²

¹Faculty of Medicine, Vilnius University, Vilnius, Lithuania

²Clinic of Neurology and Neurosurgery, Institute of Clinical Medicine, Faculty of Medicine, Vilnius University, Vilnius, Lithuania

Contact e-mail: laura.rekute@mf.stud.vu.lt

Background and Aim: Epileptic seizures are uncommon but clinically relevant in patients with multiple sclerosis (MS), and their relationship with MS remains difficult to determine. This study assessed the prevalence of epilepsy, clinical features, treatment patterns, and probable MS-related epilepsy in a single-centre MS cohort.

Materials and Methods: We retrospectively reviewed 1530 patients followed at the Vilnius University Hospital Santaros Clinics MS Centre. Diagnostic codes identified 46 patients: G40 (n=28), R55 (n=16), R56 (n=2). Records were reviewed to confirm epilepsy, exclude provoked/ alternative diagnoses, assess disease-modifying therapy (DMT), and identify probable MS-related epilepsy, defined as unprovoked epilepsy without a clear alternative cause.

Results: In the G40 group, epilepsy was confirmed in 23 patients, excluded in 4, and considered post-traumatic in 1. Among confirmed cases, 16 were women, mean age: 49.0 ± 14 years, 16 had relapsing-remitting MS, 7 had secondary progressive MS. Median EDSS score was 4. Seizures preceded MS diagnosis in 7 patients; in 1 patient, seizure was probably the first MS manifestation. In 16 patients, seizures occurred after MS diagnosis. Seizures were generalised in 14, focal in 8, and unknown in 1. Electroencephalography showed epileptiform activity in 14 patients, mainly temporal or frontal. Brain atrophy was observed in 7 patients. At least 1 DMT was used in 21/23 patients; the median number of DMTs was 2. Treatment remained unchanged in 9 patients. S1PR modulators were used in 2 patients: 1 developed a first seizure during treatment, and ponesimod was stopped in another due to recurrent seizures. The most commonly used antiseizure medications were valproic acid (n=11) and levetiracetam (n=7). Probable MS-related epilepsy was identified in 17 patients (1.11%).

Conclusions: Epilepsy was uncommon but clinically relevant among patients with MS. In some patients, seizures preceded MS diagnosis and may represent an early clinical manifestation.

Keywords: epilepsy, multiple sclerosis, seizures