

## European Stroke Organization Focused Workshop

“Rare causes of stroke”

Struga (Ohrid lake), N. Macedonia, 12-15 April, 2024



### LOCAL ORGANISING COMMITTEE

**Prof. Anita Arsovska, MD, PhD, Neurologist, LOC Chair**

**Maja Bozhinovska-Smicheska, Neurologist**

**Ass. Prof. Danijela Vojtkiv Samoilovska, MD, PhD, Neurologist**

**Elena Lichkova, Neurologist**

**Ass. Prof. Elena Simeonovska Joveva, MD, PhD, Neurologist**

**Rodna Kozoloska, Neurologist**

**Sanja Dzambazovska-Zikova, Neurologist**

**Gordana Dimeska, ICS Nurse**

**Suzana Trajkoska, Neurologist**



## 1. Introduction

European Stroke Organization (ESO) Focused Workshop 2024 “Rare causes of stroke” took place in Struga (hotel Drim), by the Ohrid lake in N. Macedonia, 12-15 April. In a friendly and relaxed atmosphere, it provided up-to-date guidance related to the management of rare causes of stroke, such as non-inflammatory blood vessel disorders (CADASIL/CARASIL, Fabry’s disease, Fibromuscular dysplasia, Moyamoya disease, MELAS, Reversible cerebral vasoconstriction syndrome, Sneddon’s syndrome); inflammatory blood vessel disorders (Susac syndrome, hematological disorders (coagulation disorders, antiphospholipid antibody syndrome, Sickle cell disease) and miscellaneous disorders (Migrainous stroke, Bone diseases and stroke, Cerebral venous sinus thrombosis and Vascular Eagle syndrome). Offering practical advice and algorithms, this focused workshop helped the clinicians in establishing an accurate diagnosis through detailed evaluation of such patients.



## 2. Organization timeline

The application was opened at the end of October 2023, and by end of December 2023 we have received 110 applications. A total of 39 applicants were selected, however, 2 of them were unable to attend. All applicants were informed about the outcome in January 2024.

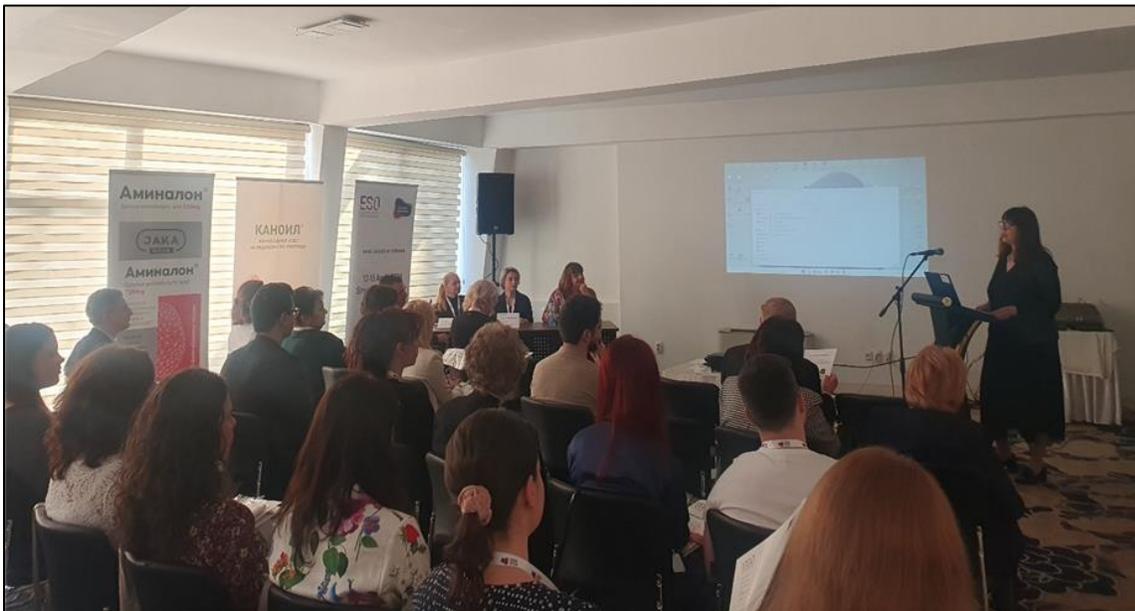
## 3. Invited faculty

Invited faculty included Maria Sheverdina (Angels Initiative-Germany), Nune Yeghiazaryan (Armenia), Irena Velcheva (Bulgaria), Vida Demarin (Croatia), Hrvoje Budincevic (Croatia), Natan Bornstein (Israel), Anna Bersano (Italy), Marialuisa Zedde (Italy), Simona Sacco (Italy), Anita Arsovska (N. Macedonia), Milija Mijajlovic (Serbia), Zheljko Zhivanovic (Serbia), Dejana Jovanovic (Serbia), Bojana Zvan (Slovenia), Mirjam Heldner (Switzerland), Patrik Michel (Switzerland) and Christine Roffe (UK).

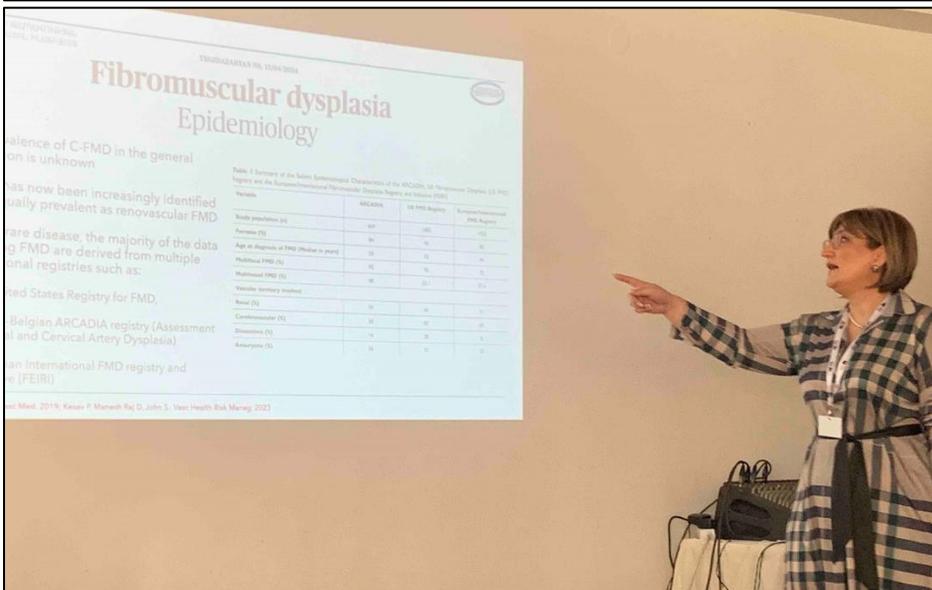


#### **4. Participants**

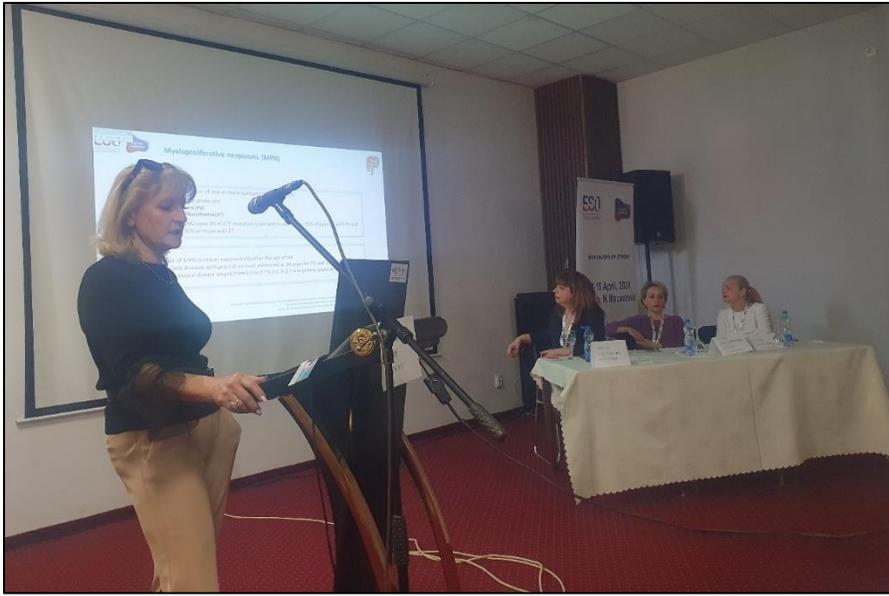
A total of 37 participants from 23 European countries took active part in the ESO focused workshop: Jora Tana (Albania), Redon Uruçi (Albania), Karen Koshtoyan (Armenia), Anya Papoyan (Armenia), Olivia Boigelot (Belgium), Marina Krasteva (Bulgaria), Gabriel Dimitrov (Bulgaria), Ivana Karla Franić (Croatia), Juraj Mark Poje (Croatia), Kateřina Benešová (Czech Republic), Triin Helin Unt (Estonia), Nika Kvernadze (Georgia), Giorgi Matchvariani (Georgia), Nella Maruškin Gabriel (Germany), Beatrice del Bello (Italy), Alvise Fattorello Salimbeni (Italy), Arianit Zajmi (Kosovo), Aurelija Daskeviciute (Lithuania), Maria Bonello (Malta), Milovan Roganović (Montenegro), Stefan Bojović (Montenegro), Glorija Gašpar (N.Macedonia), Arbana Rexhepi (N.Macedonia), Aleksandra Angelova (N.Macedonia), Vojtech Novotny (Norway), Pawel Wrona (Poland), Thomas Sanczuk (Poland), Tiago Oliveira (Portugal), Miguel Trindade (Portugal), Bogdan Ciopleias (Romania), Sebastian Andone (Romania), Marta Jeremić (Serbia), Mirjana Ždraljević (Serbia), Renato Simonetti (Spain), Simina Cosma (UK), Iryna Sheredko (Ukraine) and Volodymyr Musiienko (Ukraine). Participants were asked to send case reports on rare causes of stroke which were published in the abstract book, available at the ESO website. Three participants volunteered to present their cases at the workshop: Beatrice del Bello from Italy (Brightened vessels shedding light on the great imitator. A case report of vessel wall MRI in syphilitic cerebral vasculitis); Miguel Trindade from Portugal (Moya Moya disease) and Simina Cosma from UK (A rare case of genetic unbalanced translocation presenting as incomplete HANAC syndrome, seizures and learning difficulties). All participants received a certificate of attendance.



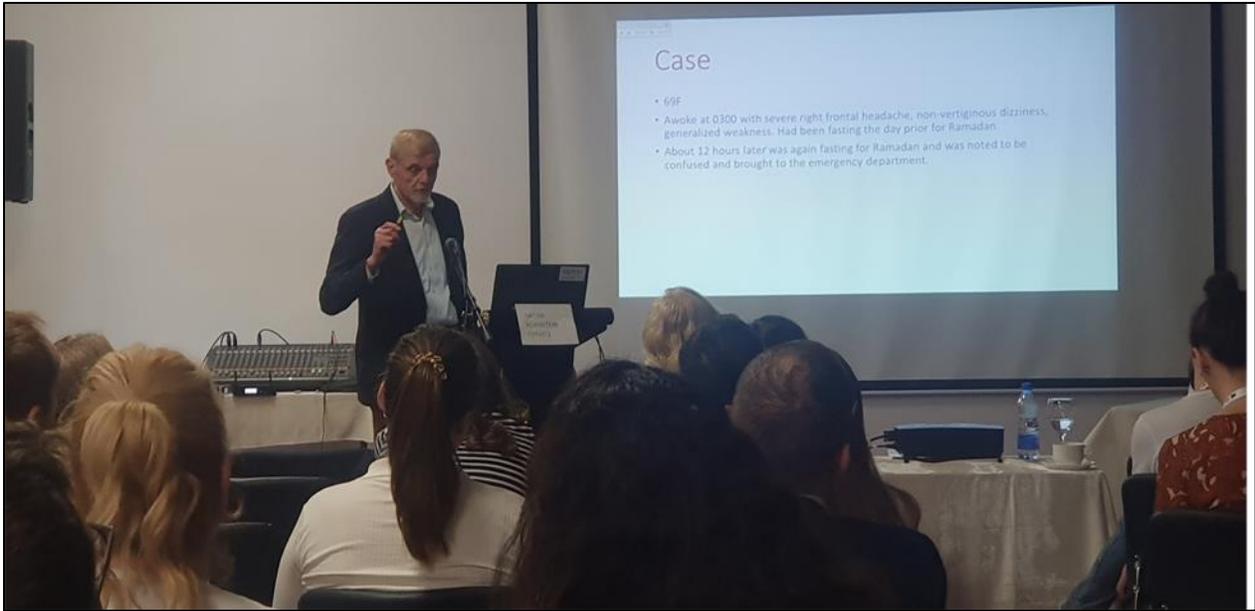
















## 5. Accommodation and workshop venue

The international speakers and participants were accommodated in hotel Drim in Struga, by the Ohrid lake. This hotel was also the venue of the ESO focused workshop.



## 6. Scientific programme

For each presentation we had scheduled 30 minutes, followed by questions and discussion. Members of the local organizing committee moderated all sessions to keep the schedule and promote questions from the participants.

### ESO FOCUSED WORKSHOP SCIENTIFIC PROGRAMME

#### “Rare causes of stroke”

**Friday, 12.04.2024**..... 19:30..... Dinner

#### Saturday, 13.04.2024

**07:30-08:30**..... Registration of participants

**08:30 -08:45**

**Welcome and opening**..... Anita Arsovska, ESO FW LOC Chair, N. Macedonia

Biljana Angelova, Rector of the University “Ss. Cyril and Methodius”, Skopje, N. Macedonia

#### **Scientific session 1. Noninflammatory blood vessel disorders**

Chairs: Emilija Cvetkovska, Elena Simeonovska Joveva, Elena Lichkova

**08:45-09:15**

CADASIL (cerebral autosomal dominant arteriopathy with subcortical infarcts and leucoencephalopathy)..... Vida Demarin, Croatia

**09:15-09:45**

CARASIL (cerebral autosomal recessive arteriopathy with subcortical infarcts and leucoencephalopathy)..... Irena Velcheva, Bulgaria

**09:45-10:15**

Fabry’s disease and stroke..... Patrik Michel, Switzerland

**10:15-10:45**

Fibromuscular dysplasia and stroke..... Nune Yeghiazaryan, Armenia

**10:45-11:15** ..... **Coffee break**

**11:15-11:45**

Moyamoya disease..... Anna Bersano, Italy (recorded lecture)

#### **Scientific session 2. Scientific symposium Angels Initiative**

Chairs: Maja Bozhinovska Smicheska, Suzana Trajkoska, Gordana Dimeska

**11:45-12:30**  
Acute Stroke Management. A mindset which can save lives.....Maria Sheverdina, Angels Initiative  
**12:30-14:00**.....**Lunch**

### **Scientific session 3. Noninflammatory blood vessel disorders**

Chairs: Sanja Dzambazovska Zikova, Danijela Samoilovska Vojtkiv, Rodna Kozoloska

**14:00-14:30**  
MELAS (Mitochondrial encephalomyopathy, lactic acidosis, stroke-like episode).....Željko Živanović, Serbia  
**14:30-15:00**  
Reversible cerebral vasoconstriction syndrome..... Marialuisa Zedde, Italy (recorded lecture)  
**15:00-15:30**  
Sneddon's syndrome..... Hrvoje Budincević, Croatia  
**16:00-19:30**  
Ohrid sightseeing tour  
**20:00**.....**Gala dinner**

**Sunday, 14.04.2024**

### **Scientific session 4. Inflammatory blood vessel disorders**

Chairs: Emilija Cvetkovska, Elena Simeonovska Joveva, Elena Lichkova

**09:00-09:30**  
Susac syndrome.....Mirjam Heldner, Switzerland  
**Hematological disorders**  
**09:30-10:00**  
Coagulation disorders and stroke..... Bojana Žvan, Slovenia  
**10:00-10:30**  
Antiphospholipid antibody syndrome and stroke.....Dejana Jovanović, Serbia  
**10:30-11:00**  
Sickle cell disease and stroke..... Christine Roffe, UK  
**11:00-11:30**.....**Coffee break**

### **Scientific session 5. Miscellaneous disorders**

Chairs: Maja Bozhinovska Smicheska, Suzana Trajkoska, Gordana Dimeska

**11:30-12:00**  
Migrainous stroke.....Simona Sacco, Italy (online lecture)  
**12:00-12:30**  
Bone diseases and stroke.....Milija Mijajlović, Serbia  
**12:30-13:00**  
Cerebral venous sinus thrombosis..... Natan Bornstein, Israel  
**13:00-13:30**  
Vascular Eagle syndrome.....Anita Arsovska, N. Macedonia  
**13:30 – 15:00**.....**Lunch**

### **Scientific session 6. Presentation of cases**

Chairs: Sanja Dzambazovska Zikova, Danijela Samoilovska Vojtkiv, Rodna Kozoloska

**15:00-15:15**  
Brightened vessels shedding light on the great imitator. A case report of vessel wall MRI in syphilitic cerebral vasculitis.....Beatrice del Bello (Italy)  
**15:15-15:30**  
Moya Moya disease.....Miguel Trindade (Portugal)  
**15:30-15:45**  
A rare case of genetic unbalanced translocation presenting as incomplete HANAC syndrome, seizures and learning difficulties.....Simina Cosma (UK)  
**16:00**  
**Closing remarks**.....Anita Arsovska, ESO FW LOC Chair, N. Macedonia  
**20:00**.....**Dinner**  
**Monday, 15. 04.2024:** .....**Participants departing**

## **7. Social programme**

The workshop started with a welcome dinner on Friday, 12<sup>th</sup> of April. On Saturday afternoon (13<sup>th</sup> of April), after the lectures, a sightseeing guided tour of Ohrid and Ohrid lake was organized and the participants were able to enjoy the rich history and magnificent views of this town protected by UNESCO. The gala dinner with live music in the evening was another chance to taste typical Macedonian food/wines and networking. On Saturday (13<sup>th</sup> of April) and Sunday (14<sup>th</sup> of April) for invited speakers we organized late lunch/dinner in Radozhda (by the Ohrid lake) and picturesque Vevchani, respectively.

## **8. Acknowledgements**

We would like to extend our sincere gratitude to the European Stroke Organization for giving us this opportunity, for the unwavering support and encouragement.

We would like to thank the Rector of the University “Ss. Cyril and Methodius” in Skopje, N. Macedonia, Prof. Biljana Angelova, for opening the focused workshop and welcoming the invited speakers and participants; with her presence and support she significantly enriched the event and set a tone of excellence that resonated with all participants.

We thank Prof. Emilija Cvetkovska, President of the Macedonian Neurology Society, for her support and willingness to chair the sessions that not only provided valuable guidance and structure but also increased the caliber of discussions.

We express our heartfelt gratitude to the invited speakers for their exceptional contribution, expertise, and engaging presentation that truly elevated the scientific content of the ESO focused workshop and left a lasting impact on everyone in attendance.

We are immensely grateful to the participants for their enthusiastic approach, interesting questions and lively discussion, as well as the submitted/presented case reports from their clinical practice.

Overall, we have received a very positive feedback and comments from the faculty and the participants. We value them highly and they mean a great deal to us as a local organizing committee. Knowing that our efforts were appreciated is truly rewarding and motivating. It reinforces our commitment to delivering quality service and support stroke education.

With best regards,

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