

Epilepsy

## **THE DATABASE OF PREGNANT WOMEN WITH EPILEPSY (EPIPREG) – PRELIMINARY SINGLE CENTRE RESULTS**

**T. Biškup**<sup>1</sup>, V. Elveđi Gašparović<sup>3</sup>, D. Vicković<sup>5</sup>, A. Bujan Kovač<sup>1</sup>, M. Milošević<sup>4</sup>, P. Nimac Kozina<sup>1</sup>, B. Đapić Ivančić<sup>1</sup>, V. Šulentić<sup>1</sup>, S. Nanković<sup>1</sup>, A. Vrbanić<sup>3</sup>, Z. Poljaković-Skurić<sup>1</sup>, Ž. Petelin Gadže<sup>1</sup>

<sup>1</sup>*Department of Neurology, University Hospital Centre Zagreb and School of Medicine, University of Zagreb, Referral Centre of the Ministry of Health of the Republic of Croatia for Epilepsy, Affiliated Partner of the ERN EpiCARE, Croatia*

<sup>2</sup>*Department of Neurology, General Hospital Varaždin, Croatia*

<sup>3</sup>*Department of Obstetrics and Gynecology, University Hospital Centre Zagreb and School of Medicine, University of Zagreb, Referral Centre of the Ministry of Health of the Republic of Croatia for Perinatal Medicine, Croatia*

<sup>4</sup>*Department of Environmental and Occupational Health and Sports, Andrija Štampar School of Public Health and School of Medicine, University of Zagreb, Croatia* <sup>5</sup>*School of Medicine, University of Zagreb, Croatia*

**Introduction:** It is estimated that 0.5-1% of pregnant women have epilepsy (women with epilepsy-WWE). Compared to women without epilepsy, pregnant WWE have an increased incidence of unfavorable pregnancy outcomes. **Objective:** Show the clinical characteristics of pregnant WWE, their treatment methods, and pregnancy outcomes. **Methods:** During the period of 2019-2021 at the University Hospital Centre Zagreb a registry of pregnant WWE was formed, where complications during pregnancy, the delivery mode, and fetal malformations in relation to the type of epilepsy, pregnancy treatment modalities, and the frequency of epileptic seizures were analyzed. **Results:** We found that the incidence of pathological pregnancies is higher in pregnant women with focal epilepsy (50%) than in pregnant WWE with generalized (15.4%) or combined epilepsy (15.4%). The incidence of delivery by emergency cesarean section was also higher in women with focal epilepsy (42.9%) compared to women with generalized (0%) or combined epilepsy (7.7%). In pregnant WWE who had two and more epileptic seizures during pregnancy, there was a statistically higher incidence of delivery by emergency cesarean section (75%, p0.001), compared to pregnant WWE with one or no seizures. There was no statistically significant correlation between polytherapy and monotherapy or no therapy on the incidence of fetal malformations. **Conclusion:** Planning of pregnancy, modification of antiepileptic therapy to minimize the teratogenic effect of certain antiepileptics on the fetus, and maintaining seizure control should be the goal for every physician in the treatment of pregnant WWE. Creating a comprehensive registry of pregnant WWE could help achieve this goal.