

# Epilepsy and delivery in singleton gestations - the impact on perinatal outcome

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## OBJECTIVE:

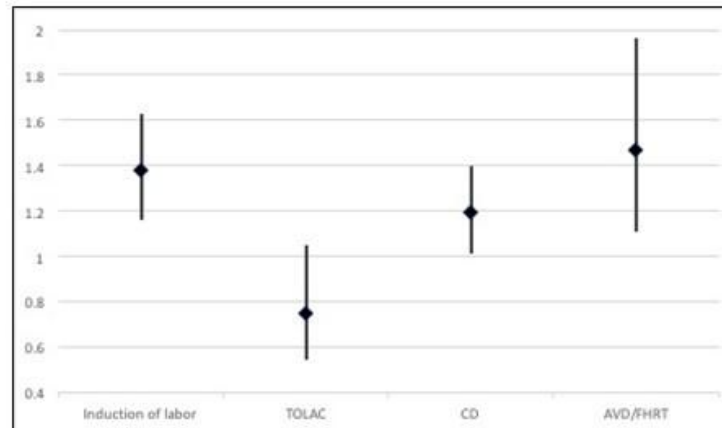
We sought to evaluate labor and delivery outcomes in women with epilepsy.

## MATERIALS:

- We performed a retrospective cohort study between 2007-2014, in a tertiary, university-affiliated medical center.
- All women with singleton gestation delivered during the study period were included, except for pregnancies where fetuses with chromosomal or structural anomalies were diagnosed.
- Perinatal outcome was compared between two groups: women diagnosed with epilepsy and women without epilepsy.

Table - The odds ratio of Epilepsy as a contributor to different outcomes

Variable	Odds ratio	95% CI	p value
Placental abruption	4.04	1.27-12.83	0.02
NICU	1.84	1.25-2.70	0.002
Seizures	4.33	1.60-11.77	0.004
TTN	2.47	1.005-6.05	0.049
RDS	7.16	2.47-20.76	<0.001



## RESULTS:

- Out of 62,102 deliveries during the study period, 61,455 met the inclusion criteria, of whom, 206 (0.3%) had Epilepsy.
- The only difference found in maternal demographics was a higher rate of nulliparity in the epilepsy group (p=0.02).
- Higher rate of placental abruption and longer post-partum admission were found in women with Epilepsy (p=0.02 and p< 0.001, respectively).
- neonatal intensive care unit (NICU) admission (16.5% vs. 9.2%), seizures (1.9% vs. 0.4%), transient tachypnea of the newborn (TTN) (2.4% vs. 1.0%) and respiratory distress syndrome (RDS) (1.9% vs. 0.4%) were significantly higher to newborns of women with epilepsy (p<0.05 for all).

## CONCLUSION:

Epilepsy in pregnant women is associated with adverse perinatal outcomes, including neonatal seizures, placental abruption and neonatal respiratory problems