



Best management of seizure in pregnancy: A systematic review

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Background: There is evidence that certain antiepileptic drugs (AEDs) are teratogenic and are associated with an increased risk of congenital malformation. The majority of women with epilepsy continue taking AEDs throughout pregnancy; therefore, it is important that comprehensive information on the potential risks associated with AED treatment is available. We aimed to compare the risk of congenital malformations (CMs) and prenatal outcomes of AEDs in infants/children who were exposed to AEDs in utero through a systematic review.

Methods: MEDLINE, EMBASE, and Cochrane Central Register of Controlled Trials were searched from inception to December 10, 2018. We included randomized clinical trials (RCTs), quasi-RCTs, non-RCTs, controlled before-after, interrupted time series, cohort, registry, and case-control studies. The literature search results screening, data abstraction, and risk of bias appraisal will be performed by two individuals, independently. We compared mono-or poly-therapy AEDs versus control (no AED exposure).

Conclusion: Exposure to certain AEDs carried an increased risk of malformation in the fetus and may be associated with specific patterns of malformation. Based on current evidence, LEV and LTG exposure carried the lowest risk of overall malformation; however, data pertaining to specific malformations are lacking. Physicians should discuss both the risks and treatment efficacy with the patient prior to commencing treatment.