

EPILEPSY AND PREGNANCY:TAKE HOME POINTS

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Take Home Points for Case 1:

1. The decision for choice of AED includes consideration of efficacy as well as side effects. For a woman of childbearing potential, this decision needs to include teratogenic risks prior to pregnancy, i.e., at the time when the drug is first prescribed, since almost half of pregnancies are not planned.
2. Although valproate has excellent efficacy for this type of epilepsy, it poses substantial risks for future pregnancies including congenital malformations, cognitive impairments, and autism in her children. Options include: levetiracetam, lamotrigine, and possibly zonisamide, lacosamide, topiramate, perampanel, or low dose valproate.
3. Aim for seizure freedom prior to pregnancy, try to use monotherapy if possible, and use lowest dose possible to control seizures.
4. Encourage preconceptual folic acid 1-4 mg daily.
5. Inform her to contact her neurologist as soon as she knows she is pregnant, because her pregnancy may change the level of her AED and levels may need to be monitored to adjust dose to avoid seizures.
6. Other pregnancy issues to discuss include sleep management, risks of OB complications, breakthrough seizures, depression, and breastfeeding.

Take Home Points for Case 2:

1. Lamotrigine has on average a 200% increase in clearance during pregnancy, but this change is very variable across individual patients. So, monitoring lamotrigine levels each month and adjusting to maintain the prepregnancy level (assuming prepregnancy seizure freedom), is a good approach to avoiding breakthrough seizures.
2. First determine if this patient has been seizure free in the 9 months prior to pregnancy and if she has had a lamotrigine level assessed prior to pregnancy on her present dose.
3. If she has been seizure free and had prepregnancy lamotrigine level, then use this level as a guide for dose adjustments.
4. If she has been seizure free but had no prepregnancy lamotrigine level, then obtain a level and use it as a guide for dose adjustments.
5. If you work in area where anticonvulsant blood levels are not available, adjustments may need to be reactive to seizures or by a modest increase during the pregnancy.
6. If she has not been seizure free, then dose adjustments or an additional anticonvulsant may be considered.
7. After delivery, the increase dosage of lamotrigine will need to be reduced to prepregnancy level or slightly above that level in 7-14 days postpartum.
8. Additional issues to consider early in pregnancy include:
 - a. Risk of breakthrough seizures and importance of monitoring lamotrigine levels
 - b. Recommend ultrasound at 16-18 weeks
 - c. Sleep management
 - d. Risk of OB complications
 - e. Risk of depression
 - f. Encourage breastfeeding