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. If a woman stops an estrogen-containing contraceptive in preparation for pregnancy, this is an ideal opportunity to lower the lamotrigine daily dose and further reduce the risk of major congenital malformations.
2. Lamotrigine clearance increases substantially during pregnancy but is variable, and reaches a 100-220% increase in clearance compared to non-pregnant baseline in the majority of women.
3. Therapeutic drug monitoring of lamotrigine levels each month and adjusting to maintain the individual target concentration is a good approach to avoiding worsening of seizures.
4. Obtain non-pregnant baseline lamotrigine levels in women of childbearing age regardless of active pregnancy plans, given that 50% of pregnancies are not planned.
5. After delivery, the increase dosage of lamotrigine will need to be gradually reduced to pre-pregnancy daily dosing amounts or slightly higher over 10 days- 3 weeks.
6. Additional issues to consider in pregnancy and postpartum 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
    g. Newborn safety