

Treating Acne During Pregnancy and Lactation

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Acne during pregnancy and lactation is common and poses a considerable treatment challenge for dermatologists. It is a disease that often is trivialized, viewed by the ill informed as cosmetic in nature. Combined with fetal and neonatal health concerns plus a healthy dose of medicolegal overlay, treatment of acne in this patient population may be complicated.

Pregnant and lactating women have been summarily orphaned from advances in drug therapy. Due to, in no small part, the pervasive litigious atmosphere surrounding birth defects in pregnancy, many health care providers have defaulted to avoiding all medications in this patient population to be “on the safe side,” and many have convinced pregnant women that taking medication to relieve pain and discomfort while pregnant is selfish and vain, especially where acne is concerned. However, erring on the safe side is not always safe. Drug avoidance can lead to increased physical and psychiatric morbidity.

Numerous studies have shown that acne is not trivial or inconsequential and may even be associated with suicidal ideations.^{1,2} In one study, female gender and acne were both jointly and independently associated with the risk for major depression and suicide.³ The traditional notion that pregnancy is a time of joy and emotional well-being is not supported by data. There is a marked increase of mood instability during pregnancy. According to the American Psychological Association, the incidence of true clinical postpartum depression in the United States is 1 in 7 pregnancies but is likely much higher, as it often remains undiagnosed.⁴ These women may consider suicide and may even harm their children. Therefore, “first, do no harm” might indeed involve aggressive therapy in this patient population; at the very least, it warrants a thorough consideration of the risks and benefits rather than a knee-jerk “wait until you stop breastfeeding” default. Without adequate

knowledge of true drug risks and with the stakes so high, we find ourselves in medicolegal quicksand. As clinicians, we understand the concept of weighing risks and benefits, but the balance of the scale cannot be determined when no evidence exists regarding the relative weight of the risk side.

Most drug risks in pregnancy are noted after market approval and are obtained from published case reports and retrospective birth defect registries. Reported problems likely represent a small fraction of actual cases. The absence of direct information regarding drug use during pregnancy is exacerbated by the knowledge that there are large gender differences in drug pharmacokinetics. This dichotomy would be expected to be especially pronounced between men and pregnant women in whom drug absorption, distribution, and elimination are all notably altered. A poorly publicized aberration in the drug approval process is that gender information is not required from generic medication bioequivalence studies. Although studies for drugs indicated for both sexes need to include male and female participants, resulting data showing gender differences are not required to be disclosed, which means that it is theoretically possible for a generic drug to be approved based on results in men only.

The pregnancy categories for drugs (A, B, C, D, and X), which were initially defined in 1979, have been our only aid in risk assessment but have little clinical relevance beyond defining the level of medicolegal risk. Furthermore, these drug categories are poised to disappear before the publication of this editorial, as new guidelines for labeling human prescription drugs are mandated to begin on June 30, 2015.⁵ Although guaranteed to be confusing at first, it seems the new labeling guidelines will be much more helpful for clinicians. One of the most important changes is the inclusion of the following statement in pregnancy and lactation subsections on drug labels: “All pregnancies have a background risk of birth defect, loss, or other adverse outcome regardless of drug exposure. The fetal risk summary below describes (name of drug)’s potential to increase the risk of developmental abnormalities above the background risk.”⁵ In the absence of concerning human data, efforts will be made to put positive animal data into perspective. In the absence of systemic exposure the label will

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state: “(Name of drug) is not absorbed systemically from (part of body) and cannot be detected in the blood. Maternal use is not expected to result in fetal exposure to the drug.”⁵ This final rule includes virtually all topical acne products, including topical retinoids.

As weak as the evidence-based risk information is for drugs in pregnancy, it is worse for lactation. It is a commonly mistaken belief among practitioners that the safety, or lack thereof, of medications during pregnancy indicates safety during lactation. In actuality, decisions should instead be based on safety data on the drug during the neonatal period. Levels of neonatal drug exposure through breast milk is 5- to 10-fold less than fetal exposure in utero.⁶ Therefore, it generally is safer for women to take drugs during lactation than during pregnancy. For the most part, medications enter the breast milk by passive diffusion from the maternal bloodstream. Several hours after a medication is taken, maternal blood levels fall and drug from the breast milk flows back along the concentration gradient into the maternal circulation. Therefore, safety is maximized by administering maternal medications immediately after the last feed and just prior to the longest sleep period of the child, usually at night.

In the lactation section of the new labeling guidelines ruling, the verbiage is completely different and highly clinically relevant. If the data demonstrate that a drug does not affect the quantity and/or quality of human breast milk, the product label must state: “The use of (name of drug) is compatible with breastfeeding.”⁵ If the drug is not systemically absorbed, the label will state simply and clearly, “Breastfeeding is not expected to result in fetal exposure to the drug.” Therefore, if these labeling guidelines are followed, it appears that all topical acne medications will be interpreted as safe during lactation under the new guidelines.

Dermatologists have taken an oath to “first, do no harm,” but in the case of acne in pregnancy and especially in lactation, we may need to treat aggressively and push the envelope beyond our current category B medications. Erring on the side of caution may be the wrong approach, especially in lactation where psychological consequences are high and neonatal exposure is minimal. The new US Food and Drug Administration guidelines should be helpful in the process of risk assessment and aid us in discussing rational, thoughtful, practical approaches with our patients.

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QUICK POLL QUESTION



I am concerned about topical retinoid use:

- a. in pregnancy due to medical concerns
- b. in pregnancy due to medicolegal concerns
- c. in pregnancy and lactation due to medical concerns
- d. in pregnancy and lactation due to medicolegal concerns

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