Case Studies

Pregnancy, Prescriptions, and Pharmacodynamics

What you don't know can hurt you…

Case Study 1: Diabetes

After taking three pregnancy tests the night before, you recognize that you are most definitely pregnant. Although you are excited about your pregnancy, you are also worried because you have type II diabetes and regularly take Glyburide, a prescription medication taken to help control your blood sugar. You know that medications have the potential to harm the developing fetus and are concerned because you know that you have been unintentionally exposing the developing fetus to Glyburide. After researching the effects of this medication on Drugs.com, you discover that Glyburide is classified as a category C drug by the current FDA classification system. You read that a category C classification means that this drug may cause harmful effects in your fetus. Information from the website recommends that you not take this medication "without first talking to your doctor if you are pregnant or could become pregnant during treatment." You wonder if you should stop taking this medication while you wait to get an appointment with your physician, but are worried about what this would do to your diabetes. (http://www.drugs.com/glyburide.html)

Case Study 2: Sudden cancer diagnosis

10-12 weeks into your pregnancy, you notice a lump in your breast. Unsure whether this is related to being pregnant (you are getting really bloated feeling), or something much more worrisome, you make an appointment with your doctor. She's very concerned, and orders a quick work-up to rule out breast cancer. Unfortunately, the tests do not rule out cancer, and in fact, a biopsy shows Stage 2 (?) cancer. Your doctor refers you to a high-risk OB doctor for further treatment discussions.

Discussion Questions

1. How much evidence is enough for clinicians to feel like they are making an informed decision?
2. Where do the majority of people find information on drugs during pregnancy and what are some good resources they should be using?
3. How do women and physicians balance unknown risks and benefits when considering which prescription medications to initiate (or continue) during pregnancy?
4. How should these decisions be made and how does the patient and physician decide which harms (to the fetus and to the woman) are potentially more severe?
5. What role, if any, does genetics play in making an assessment of what doses will be effective – and safe – for the mom and fetus?
6. How should research be pursued that would help provide more information to patients needing to make these difficult decisions?

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