

# Consider Risks of Not Treating Depression

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SAN FRANCISCO — Consider not only the risks of antidepressant drugs but also the risks of not treating depression during pregnancy, Dr. Andrea J. Singer recommended.

Approximately 1 in 10 women become depressed at some point during pregnancy. In addition to nonpharmacologic therapies such as increased social support, cognitive-behavioral therapy, or counseling as first-line treatments, many depressed women need supplemental antidepressant medication, she said at the Perspectives in Women's Health conference sponsored by OB.GYN. NEWS.

"How we treat depends on the severity of depression. There are clear data that a significantly depressed mother is at more risk than a mother on antidepressant medication," Dr. Singer, director of women's primary care at Georgetown University Medical Center, Washington, said at the meeting.

Because the effectiveness of antidepressant medications generally is comparable between classes and within classes of drugs, the choice of pharmacotherapy—and which medication—rests on questions of safety and tolerability for both the mother and fetus, patient preference, cost, and the quantity and quality of data available on the drug.

If depression is not adequately treated, the woman will have a higher risk for suicide, poor maternal and fetal nutrition, adverse neonatal outcomes, continued depression into the postpartum period, and impaired mother-child bonding, said Dr. Singer.

Depression during pregnancy is associated with an increased likelihood of using drugs, alcohol, or nicotine and a decreased likelihood of getting early prenatal care.

Depressed pregnant women often don't report depression but more often complain of physical health problems, compared with nondepressed pregnant women, she added.

The incidence of premature births is higher in depressed than in nondepressed women. Compared with term deliveries, children born prematurely tend to perform less

well in school, are less likely to graduate from high school, and have higher rates of neurosensory impairments, bipolar disorder, and subnormal height.

Antidepressants probably are the best-studied class of drugs used during pregnancy, though the amount of data from controlled clinical trials still is small, said Dr. Singer. She is on the speakers' bureau of Pfizer, which makes the SSRI sertraline.

Two studies in the past decade encompassing a total of 1,089 women found no causal relationship between use of tricyclic and noncyclic antidepressants and adverse pregnancy outcomes, Dr. Singer said.

In general, no increase in teratogenic risk has been found with use of the SSRIs fluvoxamine or sertraline, which are the antidepressants most commonly prescribed for pregnant women.

One recent study suggests that paroxetine use during the first trimester might be associated with an increased risk of cardiovascular birth defects, particularly ventricular septal defects, she said.

In addition, there have been several reports of possible withdrawal symptoms in babies who were exposed to SSRIs during or at the end of the third trimester. The reports describe neonatal jitteriness, irritability, or respiratory difficulties.

Physicians may want to consider temporarily halting maternal SSRI therapy near the end of the third trimester in some patients who can tolerate an interruption in therapy and restarting the medication in the postpartum period, Dr. Singer suggested. Watch neonates born to women who took SSRIs late in pregnancy for potential withdrawal signs, she added.

The women at greatest risk for developing depression during pregnancy are those with a history of depression before pregnancy. "That's a red flag to follow the patient closely during pregnancy," she said.

Other risk factors for depression during pregnancy include a history of premenstrual dysphoric disorder, younger maternal age, living alone or with limited social support, ambivalence about the pregnancy, conflict with her spouse or significant other, and having multiple other children. ■

## DRUGS, PREGNANCY, AND LACTATION

### Vaccines

Vaccines have arguably saved more lives and prevented more diseases than any other class of drug. The American College of Obstetricians and Gynecologists states that vaccination before conception is preferred to vaccination during pregnancy, but the benefits of immunization to the pregnant woman usually outweigh the theoretical risks (Committee Opinion, No. 282, January 2003). Only vaccines recommended for adults of reproductive age are included in the following discussion.

Vaccines are classified as bacterial or viral; whole (killed, inactivated, or live attenuated); or partial microorganisms that can induce antibody formation. Although these vaccines can cause infections of the embryo or fetus, and pregnant women should be informed of the presence of live organisms if they are given a live attenuated virus vaccine, there is no convincing evidence that any vaccine, bacterial or viral, has caused fetal or embryonic harm.

Theoretically, however, live attenuated bacterial or viral vaccines could cause disseminated infection in pregnant patients with impaired immunity, such as those with HIV or AIDS.

Indications for two bacterial vaccines (both capsular polysaccharide—quadrivalent meningococcal and polyvalent pneumococcal) are not altered by pregnancy. Vaccinating a pregnant woman with the live attenuated bacille Calmette-Guérin vaccine is generally not recommended, but may be indicated if the woman works in a setting where many patients are infected with resistant strains of TB.

There are two typhoid vaccines available. The oral live attenuated virus vaccine is not recommended during pregnancy, except in cases of the prospective mother's continued, close exposure or travel to typhoid-endemic areas. However, the capsular polysaccharide intramuscular vaccine should be safer in pregnancy because it does not contain live bacteria.

Live attenuated virus vaccines are normally contraindicated in pregnant women because of the known or potential risks from the wild viruses. These include influenza intranasal, measles, mumps, rubella, smallpox, varicella, and yellow fever. Vaccinating in the postpartum period or avoiding conception for at least 30 days after inoculation are two strategies to avoid exposure during pregnancy.

A live attenuated virus vaccine may be indicated in pregnancy under special circumstances. For example, because the risk of fetal vaccinia is low, smallpox vaccine is recommended for pregnant women exposed to smallpox or monkeypox. Yellow fever vaccine also should be given in pregnancy if exposure is unavoidable.

Rubella infection occurring early in gestation is known to cause congenital rubella syndrome. Over a 10-year period, nearly 700 pregnant women were given rubella vaccine. There was no evidence of embryonic/fetal adverse effects, but subclinical infection was found in 2% of the infants from susceptible mothers. A woman given the vaccine 3 weeks after conception had documented embryonic/fetal infection throughout

gestation but still delivered a healthy infant.

Although contraindicated, varicella vaccine is thought to present much less risk to the embryo and fetus than from infection with the wild virus. In a pregnancy registry involving more than 800 women who had been vaccinated within 3 months of or anytime during pregnancy, there was no evidence of congenital varicella syndrome (CVS) or malformations consistent with CVS.

Inactivated poliovirus vaccine is not routinely recommended for adults living in the United States; however, it is recommended for unimmunized adults in close contact with a child receiving oral polio vaccine (OPV, which is not available in United States) or who have an increased risk of exposure to OPV or wild poliovirus. Hepatitis A (inactivated) and hepatitis B (recombinant surface antigen) vaccines can be used in pregnancy for pre- and postexposure in women at risk of infection.

The indications for rabies vaccine (killed virus) are not altered by pregnancy. In a prospective study, the vaccine was given to 202 pregnant women who had been exposed to rabies. No increase in maternal or fetal complications was observed, compared with nonexposed controls. There also does not appear to be an increased risk to the embryo or fetus from vaccination within 30 days of conception with quadrivalent human papillomavirus (HPV) recombinant vaccine. But if pregnancy is detected, ACOG recommends delaying completion of the three-dose vaccination schedule until pregnancy is completed (Committee Opinion, No. 344, September 2006).

Vaccination with inactivated influenza vaccine is considered by ACOG to be an essential element of prenatal care (Committee Opinion, No. 305, November 2004). The vaccine can be given at any time during pregnancy. However, the intranasal influenza vaccine, a live attenuated virus preparation, should not be used in pregnancy.

Excretion of live viruses from vaccines into breast milk may occur. There is a report of tertiary contact vaccinia transmission for smallpox vaccine from a mother to her nursing infant. The effects of the other live virus vaccines on a nursing infant are unknown, but the risk of adverse effects appears to be very low. Vaccines that do not contain live viruses probably carry no risk to the infant.

Pregnancy registries exist for four vaccines. Health care professionals are encouraged to report exposures of pregnant women to the appropriate registry: hepatitis B vaccine (800-670-6126); HPV vaccine (800-986-8999); meningococcal vaccine (800-822-2463); and varicella vaccine (800-986-8999).

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