Q&A with Dr. Eva Pressman About Pregnancy, the Vaccine and More

Eva Pressman, M.D., chair of the Department of Ob/Gyn and an expert in high-risk pregnancy, recently held an information session with the Department of Imaging to address concerns about the COVID vaccine in women who are pregnant, breastfeeding or are concerned about fertility impacts. Here is a summary of the discussion, grouped by topic.

Safety in Pregnancy/Breastfeeding

Q: How do you know the vaccine is safe for women who are pregnant or breastfeeding when the vaccines were not tested on them? With no data, how do we make an informed choice?

A: Although it's true that pregnant and breastfeeding women were not enrolled in any of the original studies, it turns out that many of the women that enrolled in those studies—several hundred, at least—were actually pregnant and didn't know it at the time. So we do have original data from those women as well as studies that are ongoing specifically in pregnancy, and we have registries of more than 140,000 women who received the vaccine during pregnancy and reported information about their outcomes. We have all of this data on women who have been pregnant and breastfeeding when they received the vaccine, which does allow for a much more informed choice even though the original studies intended to not study pregnant people.

Q: What do we know about the vaccine and fetal development or complications?

A: We now have information from hundreds of thousands of pregnancies that the COVID vaccine does not increase the risk of birth defects or pregnancy complications like preeclampsia or pre-term labor. On the contrary, COVID infection has been associated with increased risk of pre-term labor, preeclampsia and miscarriage. We know that the vaccine is much safer in pregnancy than the disease itself.

Q: Does the vaccine raise the risk of miscarriage?

A: The data that we have from the COVID vaccine is that it does *not* increase the risk of miscarriage. On the other hand, COVID infection *does* increase the risk. So getting the vaccine might actually decrease your risk of miscarriage because it would decrease your risk of having a serious COVID infection.

Miscarriage is very common

Q: Is it safe for lactating momsto get the vaccine?
A: Yes. We've collected a lot of data and are doing some of the studies here on breastfeeding before and after vaccination. And it does seem that the antibodies get into the breastmilk and are potentially protective for the infants.

Pregnancy Complications

Q: What complications from COVID do you see in pregnant women?

Q: Is it advisable to spread out the time between first and second doses (1 months) due to existing pregnancy complications?

A: No, the vaccine doses should be given on schedule as recommended because that's how they are the most effective. There are certain vaccines (like pertussis) that are recommended at certain times. The pertussis vaccine is recommended during the third trimester so your antibody levels are highest around the time that you deliver.

Q: I had and recovered from COVID; do I have immunities since I was exposed? Do I still need the vaccine?

A: Having had COVID provides some protection, but it turns out, not as good of protection as you get from the vaccine. So, even people who have had the disease should get the vaccine.

Fertility

Q: Does the vaccine impact a woman's fertility?

A: We recognize it's an important concern and that you wouldn't want to do anything now that would impact your fertility later. What we are seeing is that the vaccine does not impact a woman's ability to get pregnant.

Early on in the vaccine's development, it was thought that one of the proteins on the surface of the COVID virus for which the vaccines build an immune response was similar to one of the proteins that embryos use to implant in the uterus early in pregnancy. At that time, the concern was that building an immune response to a protein that is important for implantation would make it more difficult for women to get pregnant after vaccination. The good news is that the proteins are actually much more different than initially thought—enough that there really is no concern.

What we have seen clinically since vaccine use began backs that up. We see people who are vaccinated getting pregnant on their own; we also see patients of our infertility specialists—who are trying to get pregnant with help because they've had difficulties before COVID—get pregnant after vaccination at the same rate as if they had not been vaccinated. Both of those pieces of data are very reassuring.

Q: For women who are on prednisone for fertility treatment, does it suppress the effects of the vaccine?

A: Immuno-suppressants may mean a vaccine will create a less strong or shortened response. Most of the time the prednisone that is given for IVF is a relatively low dose used for a short term compared to uses for other medical conditions. Any vaccine is better than no vaccine and immunosuppression is not a contraindication to vaccine. It might be an indication for extra doses but should not prevent someone from getting the vaccine.

Q: Has there been any research on sperm count and vaccination?

A: Recent information shows there's no effect on sperm count from vaccination. On the other hand, COVID infection in men can decrease sperm count. So if you're trying to preserve your fertility as a man, it is much better to get the vaccine than to get the disease.

Q: Should you get the vaccine before or after fertility treatment?

A: Get it sooner rather than later. Unless your procedure is in the next 2-3 days, I would get the vaccine today. There's no advantage to waiting; there's only harm.

Spreading Infection

Q: How easily can you spread COVID after you're vaccinated?

A: If you have an infection, you've probably been spreading it to other people for at least several days, if not weeks. That's the harmful thing about this virus—asymptomatic spread, and that you can expose other people to it without knowing. Vaccine decreases the amount of virus you can shed but it doesn't eliminate that spread.