

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—occurring in 15 to 30 percent of pregnancies—and so, when they occur, many people have concerns that they did something that caused it to happen. This is almost never the case. Any serious health complication during pregnancy puts you at risk for miscarriage or pre-term delivery, and pre-term delivery puts your baby at risk for health complications. So, preventing severe COVID disease in pregnancy is really critical, and that's why I worry so much about women who think they're protecting their babies by not getting the vaccine; in reality they might be putting their babies at risk by not getting the vaccine if they get COVID while they are pregnant.

Q: Is it safe for lactating moms to 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?

A: The most worrisome complication is respiratory failure; they need to be in the ICU or have a breathing tube, and that can go on for weeks. Generally, the growing uterus makes breathing harder and the baby requires more oxygen. When women get very sick, delivery is usually what happens—often, when the baby is very pre-term. Then you have a very sick mom and an equally sick baby in the ICU.

Vaccine Timing

Q: When is it recommended to get the vaccine in pregnancy?

A: As soon as possible! Whenever you can get it, it is safe and effective. The sooner you get the vaccine, the less likely you are to get a severe infection with COVID and that is most important in pregnancy as well as outside of pregnancy.

Q: I had side effects from the first vaccine dose, should I proceed with the second dose?

A: Generally, yes. Even in cases of a severe allergic reaction, we can pre-treat and give the vaccine in a more controlled setting for the second dose. If the reaction to the first dose was fever, or fatigue, or aches, those are typical and it's safe to give the second dose without pre-treatment.

Q: Is it safe to also get a flu shot while I'm getting the COVID vaccine?

A: The most recent data shows that there is no need to wait in between vaccines so, yes, you can get the vaccines together if you need to.

Q: Why do you have to wait until the 12th week of pregnancy to get a flu shot but it's OK to get the COVID vaccine early in pregnancy?

A: In general, we like to avoid exposures of anything in the first trimester of pregnancy and that is why there's been a general recommendation to wait until 12 weeks to get a flu shot. There's actually no data to say that getting vaccinated for flu is dangerous in those 12 weeks and we actually have much more data on the COVID vaccine in that timeframe—thanks to all the health care workers who got the vaccine when it was first available who happened to be in their first 12 weeks of pregnancy. So there is no impact on pregnancy from the COVID vaccine in the first, second or third trimesters or the immediate post-partum period. The vaccine is safe at all of those times and there is no reason to wait.

The only reason that you might choose a certain time is that, we know within the first few days of getting it you might feel poorly. If you're about to have a medical procedure, or a surgery, or have your baby in those next few days, it will be hard to tell whether those symptoms, such as fever, are a complication of your medical procedure or from the vaccine. In general, we like to separate those by at least a few days.

Q: Is it advisable to spread out the time between first and second doses (1-2 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. Everyone should get the vaccine, whether they have had COVID or not.

Vaccine Side-Effects

Q: Does having recovered from COVID increase your chances for side effects from the COVID vaccine?

A: There is no data that says getting the vaccine after COVID gives you more symptoms.

Q: What about blood clots?

A: We know that having COVID increases your risks of blood clots. We also know there is a small risk of people getting blood clots who have had the Johnson & Johnson vaccine (though we don't know if those are related). If you have a history of blood clots, the J&J is probably not the best vaccine for you.

Q: How can anyone keep pushing a vaccine without data on long-term side effects?

A: This is challenging, and we don't have a crystal ball telling us what long-term side effects might be. We do know the risk of getting COVID is very, very high. We already know that the long-term side effects of COVID (or "long COVID") are impacting people who had COVID over a year ago. It can be devastating to your heart, lungs and neurological system. I don't know what the long-term side effects of the vaccine are, but you have to balance those risks for yourself. We really have no choice.

Q: Do we know about long-term effects of other similar vaccines?

A: We don't know of any vaccines, other than those that have live virus in them, that are not recommended to be given during pregnancy. For example, the Rubella vaccine has an attenuated level of live Rubella in it, and we don't want to give pregnant women that vaccine. But any vaccine that doesn't have live virus has been shown to be safe in pregnancy, for decades.

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.

Q: Can vaccinated people pass COVID to others if they become positive?

A: Unfortunately, yes. We are seeing that the amount of virus they pass on is less than for an unvaccinated person (some have said even 1,000 times less) but the Delta variant is so contagious that it can spread.

Q: Should people wear masks around infants?

A: Wearing a mask prevents respiratory droplets from you getting on someone else. If those droplets happen to have COVID in them, they could cause COVID in the other person. Masks can also prevent droplets from other people—when they cough, sneeze or speak—from getting into your mouth and nose. It's more that you won't infect others than that they won't infect you, but if both people are wearing masks, both are protected. Infants can't get the vaccine but can get some protection if their mother was vaccinated during the pregnancy or was vaccinated and is breastfeeding. Wearing a mask is another way we can protect infants from all infections.

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