Hydroxychloroquine (Plaquenil®)

This sheet is about exposure to hydroxychloroquine in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

**What is hydroxychloroquine?**

Hydroxychloroquine is a medication that has been approved for use to prevent and treat malaria and to treat autoimmune conditions such as rheumatoid arthritis and lupus. It has also been used to treat COVID-19, Q fever, and Sjögren’s syndrome. Hydroxychloroquine is sold under several brand names, including Plaquenil®.

For more information on malaria, rheumatoid arthritis, and lupus, please see the MotherToBaby fact sheets at https://mothertobaby.org/fact-sheets/malaria/, https://mothertobaby.org/fact-sheets/rheumatoid-arthritis/, https://mothertobaby.org/fact-sheets/lupus-pregnancy/.

Sometimes when people find out they are pregnant, they think about changing how they take their medication, or stopping their medication altogether. However, it is important to talk with your healthcare providers before making any changes to how you take this medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

*I take hydroxychloroquine. Can it make it harder for me to get pregnant?*

Hydroxychloroquine has not been studied to see if it could make it harder to get pregnant.

**Does taking hydroxychloroquine increase the chance for miscarriage?**

Miscarriage can occur in any pregnancy. Several studies have not found a higher chance of miscarriage directly related to hydroxychloroquine. One study reported a higher number of miscarriages than expected, but the authors stated that the mother’s health conditions may have contributed to the higher number since malaria and autoimmune conditions like lupus can increase the chance of miscarriage.

**Does taking hydroxychloroquine increase the chance of birth defects?**

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Most studies looking at the use of hydroxychloroquine to treat rheumatic disease in pregnancy have not found an increased chance for birth defects. One study observed a small increased chance for birth defects at higher doses of hydroxychloroquine, but there was no pattern to these defects to suggest they were due to the medication. Other studies have not seen an increase in birth defects with the use of hydroxychloroquine in pregnancy at any prescribed dose.

**Does taking hydroxychloroquine in pregnancy increase the chance of other pregnancy related problems?**

Studies do not suggest that hydroxychloroquine increases the chance for pregnancy-related problems such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

Having malaria or lupus in pregnancy may increase the chance for preterm delivery. Hydroxychloroquine may benefit pregnancies by reducing active disease of lupus. Hydroxychloroquine may also reduce the chance for a baby to be born with a specific heart problem called congenital heart block. More studies are needed to confirm if hydroxychloroquine helps prevent these or other pregnancy complications.

Damage to the inner lining of the eye (called retinopathy) is an uncommon side effect of taking hydroxychloroquine. This has raised concern that taking hydroxychloroquine in pregnancy could cause vision problems in the offspring. However, most studies on young children born to people who took hydroxychloroquine in pregnancy have not found an increase in eye problems.

**Does taking hydroxychloroquine in pregnancy affect future behavior or learning for the child?**

Studies have not been done to see if hydroxychloroquine can cause behavior or learning issues for the child.
Breastfeeding while taking hydroxychloroquine:

Hydroxychloroquine gets into breastmilk in small amounts. Infants that are born preterm or are younger than one month of age have a stomach and intestines that are less mature than older babies. This might allow more medication to enter their blood stream. Small studies on hydroxychloroquine in breastfeeding have reported no harmful effects on infants. This includes no evidence of vision, hearing, or growth problems in children who were followed up to about one year of age. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

If a male takes hydroxychloroquine, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

A review of studies on males who used medications to treat rheumatic disease at or near the time of conception did not find that hydroxychloroquine affected their fertility or pregnancy outcomes. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

MotherToBaby is currently conducting a study looking at autoimmune diseases and the medications used to treat autoimmune diseases in pregnancy. If you are interested in taking part in this study, please call 1-877-311-8972 or visit https://mothertobaby.org/join-study/.

Please click here for references.