The RhoGAM Shot Saves Babies' Lives Long Before They Are Born

By Ana-Marija Dolaskie — July 25, 2017

Does your blood type, specifically your Rh factor, matter in your daily life? Not in the slightest. But when pregnant, your Rh status can matter, especially if it's negative.

Enter the RhoGAM shot — a triumph in medicine over Rh (rhesus) disease [1].

Rh is a protein most people have on their red blood cells. A person who is Rh-positive has the protein on the red blood cells. A person who does not have the protein in the red blood cells is considered Rh-negative. An expectant mother who is Rh-negative risks developing Rh disease, a condition caused by an incompatibility between a mother's blood and that of her fetus. The antibodies to the Rh protein must be administered in her system to avoid the potential of life-threatening complications during pregnancy and/or labor. Since the blood type of the fetus is unknown during pregnancy, and mixing of blood can occur, the shot is administered during the 28th week of pregnancy, and then again 72 hours after delivery.

It is known that 85 percent of the population is Rh-positive, while roughly 15 percent are Rh-negative. And I am part of the latter. I was curious about blood types beyond the information provided by my OB's, so I did some research. After much reading, I am amazed at what we know about Rh disease today, and how a simple shot has saved countless lives.

Rh factor [2] is not typically a health concern, unless a woman is pregnant (or a blood transfusion is needed.) Then, it could be deadly to the baby. Thus, the protein has been researched in depth because it tends to incite a strong immune reaction. If red blood cells containing Rh protein were to enter the blood stream of a person who is Rh negative, that person's immune system would detect antigens, and antibodies would attack the Rh-positive blood cells. In a first pregnancy, this means the mother's blood would become sensitized. Although the antibodies are unlikely to break
the placental wall and harm the first fetus, future pregnancies have a different — more serious, outcome. Because the mother's immune system has been primed from the first pregnancy, if a mother is to become pregnant again with a fetus that is Rh positive, her immune system would literally attack the fetus's blood cells. This can cause profound anemia, brain damage from a high bilirubin, seizures, jaundice, and in some cases — fetal death.

And here's the most astounding part: We didn't quite know of this hemolytic disease until 1939, when two New York imuno-hematologists published their findings [3]. It's difficult to say (or even think about), prior to their findings, how many lives had been lost. Nearly 30 years after the discovery, the first injectable was approved in the United States and England. As I enter my 28th week of pregnancy. I received my RhoGAM injection today. After delivery, I will be receiving another RhoGAM injection. In a future pregnancy, I'll be receiving the shot at regular intervals, during the second trimester.

A disease that once claimed the lives of tens of thousands of babies in the U.S. alone, is now eliminated in developed countries. There is no doubt in my mind that this scientific discovery has so far been the most beneficial in my life, despite the fact that it was a real pain in the butt. *Pun intended.*

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