***Script: HDN RH Incompatibility***

Participants:

Interviewer (Callie)

mom: Elly Doe (Meg)

Dr. Montgomery(Vivian)

**Style:** Interview style

**Podcast name:** Motherhood moments

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00:00-00:28 *Disclaimer: this case study was created specifically for Hemolytic Disease of the Newborn- Rh incompatibility. The events and characters in this podcast are fictional, but the information presented is grounded in extensive research and evidence from reputable medical sources. This podcast was a collaborative effort created using thorough research and a detailed case Study with original art.*

00:28-00:53 **Interviewer:** Welcome to [Motherhood Moments] — the show where we dive into the ideas, stories, and insights that matter. Every week, we bring you conversations with experts, thinkers, and creators who share their experiences, perspectives, and knowledge to inspire and empower you. Whether you're here to learn something new, spark creativity, or just enjoy an engaging discussion, we're glad to have you with us. So sit back, relax, and let’s get started on today’s journey together.

00:53-01:15 **Interviewer:** For those who don’t know me- I’m Callie and today I am joined by Elly Doe as she recounts her experience with a crucial part of pregnancy: the Rh factor. Her story highlights the importance of understanding this issue and its impact on mom and baby.

To share her story of how she went through Rh incompatibility firsthand, give a round of applause to Elly Doe.

01:15-01:18 **Mom:** Thank you for having me, I’m super excited to be here.

01:18-01:30 **Interviewer:** Thanks for joining us on the podcast!

For those wanting to learn more of the technical points about this fascinating topic, we are also joined by the lovely Dr. Montgomery who is here to answer all our questions and provide valuable insight!

01:30-01:37 **Doctor:** It’s going to be an interesting topic that I think will help a lot of new mothers navigate through similar situations.

01:37-01:44 **Interviewer:** So, let's start from the beginning, how did you first learn that you were Rh-negative during your first pregnancy?

01:44-02:01 **Mother:** I actually found out I was Rh negative with my first baby during my initial prenatal checkup. My doctor explained that having Rh-negative blood doesn’t usually cause problems or any symptoms, but it could become an issue if I were to get pregnant again in the future and if I don’t receive any precautions (Myle & Al-Khattabi, 2021).

02:01-02:05 **Interviewer:** Hopefully Dr. Montgomery can give us some more details.

02:05-02:24 **Doctor:** Yes, anyone who is pregnant will get an extensive history taken during their prenatal visits. One of the routine blood tests that we use is called the indirect Coomb test (Myle & Al-Khattabi, 2021). This test is interesting as it can detect the presence of anti-RH (D) antibodies which is created by the mom’s body in response to her baby’s Rh+ blood type (Theis et al., 2019).

02:24-02:28 **Doctor:** I’m just wondering if you got Rhogam during your first pregnancy?

02:28-02:40 **Mom:** No, I’m pretty sure I didn’t. We didn’t have any symptoms with our first birth and my partner and I have always wanted a big family. So when we got the news that I was pregnant with our second child, we felt very happy.

02:40-02:50 **Interviewer:** That’s a wonderful ambition. Given that Elly didn't receive Rhogam with her first pregnancy, are there any special conditions or things she should be expecting to be different with this pregnancy?

02:50-03:43 **Doctor:** Usually the first pregnancy is not affected since her body has not experienced mixing of different Rh blood types so there are no defenses made against the first baby’s blood. In the first pregnancy, our immune system produces IgM antibodies which is the first antibody produced when new antigens are found, however as they are larger they are not able to cross the placenta. Once the mom’s body has created antibodies or defenses, the mom is now “sensitized” and she has developed antibodies to fight against any future pregnancies where the baby has Rh+ blood types. In the second pregnancy and onwards, our body remembers that these IgM antibodies are too big and so it switches to smaller IgG antibodies, which is the only antibody able to cross the placenta membrane to break down the baby’s red blood cells (Myle & Al-Khattabi, 2021).

That is why the second or subsequent pregnancy is when the issue arises (Myle & Al-Khattabi, 2021).

03:43-03:47 **Interviewer:** What were your symptoms in your second pregnancy?

03:47-04:08 **Mom:** I remember feeling kicks the day before, but when I woke up one morning, I felt nothing. After about 5 days of no movement, this sense of dread filled my heart as I was still preterm.

I immediately went to the hospital with my partner where I was transferred to a labour and delivery unit and I was told that I had to have an emergency c-section (Routray et al., 2020)…,

04:08-04:12 **Interviewer:** That must have been very hard for you and your partner, how was your baby?

04:12-04:31 **Mom:** My baby unfortunately was only 2.3kg, and when I got to hold her, her skin and eyes were yellow and she had basically no energy at all. They took her to the NICU after they did this test on her, but I don’t remember what it was called or what they told me, I was just feeling so shocked and stressed

04:31-04:37 **Interviewer:** That’s understandable, you went through so many turns of events, it must have been very taxing.

04:37-04:45 **Doctor:** What you went through was very challenging and it’s unsurprising what a toll it took on both your emotional and physical state. If you want I could clear some things up for you?

04:45-04:47 **Mom:** sure that’d be great

04:47-04:48 **Doctor:** Ok, so they probably did the Direct Coombs test to see if any anti-Rh antibodies were attached to your baby’s red blood cells (Theis et al., 2019). They also might have done an Indirect Coombs test on the mother, do you remember them doing that to you (Elly)?

04:48-05:02 **Mom:** yes I believe they did take a blood sample for that

05:02-05:10 **Doctor:** An Indirect and direct Coombs test are both useful to get a definitive diagnosis of hemolytic disease of the newborn (Myle & Al-Khattabi, 2021). Did they mention that to you at all?

05:10-05:14 **Mom:** I think I remember them saying something about that.

05:14-05:38 **Doctor:** It occurs in Rh- negative mothers with an Rh- positive baby. Your baby showed some symptoms for it such as the yellowing of the skin and eyes. That’s something called jaundice which is occurring because your baby’s blood cells are being broken down quickly because of HDN (Myle & Al-Khattabi, 2021). Some other common symptoms include lethargy, heart failure, and enlarged organs (Irinmwinuwa et al., 2023). In the most serious of cases, we’ll have hydrops fetalis.

05:38-05:41 **Interviewer:** Hydrops fetalis? That sounds ominous

05:41-05:52 **Doctor:** It is- hydrops fetalis is the death of the fetus due to severe heart failure and build-up of fluid in two or more body areas of the baby (Irinmwinuwa et al., 2023; Muscat Baron & Micallef, 2021; Myle & Al-Khattabi, 2021). The fluid accumulation is due to the breakdown of the red blood cells (Muscat Baron & Micallef, 2021).

05:52-06:07 **Mom:** Wow, luckily that did not happen, my baby girl is doing fine at home. She went through phototherapy which really helped with the jaundice (Thomas & Abiramalatha, 2021). She’s so energetic now it’s like she's acting like she never gave her parents a heart attack at her birth. (laugh)

06:07-06:13 **Interviewer:** What does close monitoring look like for mothers with Rh incompatibility?

06:13-06:24 **Doctor:** So, because of the Rh incompatibility, extensive history would be taken and moms would typically go for more regular blood tests. This process is called antibody screening, and they check it throughout the pregnancy.

06:24-06:35 **Mom:** I do remember being told about the Kleihauer-Betke test when I went into the hospital at the time of my second child’s birth.

06:35-07:07 **Doctor:** Absolutely! Tests like the Rosette test, or the Kleihauer-Betke acid elution is performed if there is clinical suspicion of fetal maternal hemorrhage (Myle & Al-Khattabi, 2021). This is used to see if mom's body was starting to produce antibodies against the baby’s blood (Myle & Al-Khattabi, 2021). The second recommendation for prevention is early ABO group and RhD factor determination with an indirect antiglobulin test (IAT) within the first trimester of pregnancy which gives information to your healthcare providers about whether you are at risk of Rh incompatibility (Bennardello et al., 2015).

07:07-07:15 **Interviewer:** what are some precautions or interventions that could be done to reduce risks of Rh- incompatibility symptoms?

07:15-07:34 **Doctor:** RhoGAM is actually a great precautionary intervention. The injection creates antibodies that tricks the mom’s body into thinking she already made antibodies or came up with a defense system against her baby’s blood cells (Urbanec et al., 2024; Yoham & Casadesus, 2023). Typically, a second shot of RhoGAM would also be given within 72 hours after delivery (Bennardello et al., 2015)

07:34-07:39 **Mom:** Oh okay! That’s good to know for my future pregnancies, thank you dr. Montgomery!

07:39-07:50 **Interviewer:** That’s such a powerful story, and thank you for sharing it. Before we wrap up, Elly is there any advice you’d give to other mothers who might be dealing with Rh incompatibility in their pregnancies?

07:50-08:05 **Mother:** Yes, I’d say don't be afraid to lean on your healthcare providers for support and make sure to fully understand each step of the process. It can be a lot to manage emotionally, but there are so many tools available now to help. Knowing you're not alone can make all the difference.

08:05-08:11 **Interviewer:** Thank you so much, Elly and Dr. Montgomery, for joining us today!

08:11-08:28 **Outro:** And that’s it for today’s episode of “Motherhood Moments”. Thanks for tuning in, and if you found this episode helpful or inspiring, please share it with others who might benefit from it.