

First Report of a Severe Thrombocytopenia after RSV Vaccination in a Parturient

Background

The Centers for Disease Control and Prevention (CDC) and the American College of Obstetricians and Gynecologists (ACOG) recommend RSV vaccination for pregnant individuals in the third trimester to prevent respiratory syncytial virus (RSV) infection in infants.

Serious adverse events in parturients after RSV vaccinations mentioned in the package insert ² include:

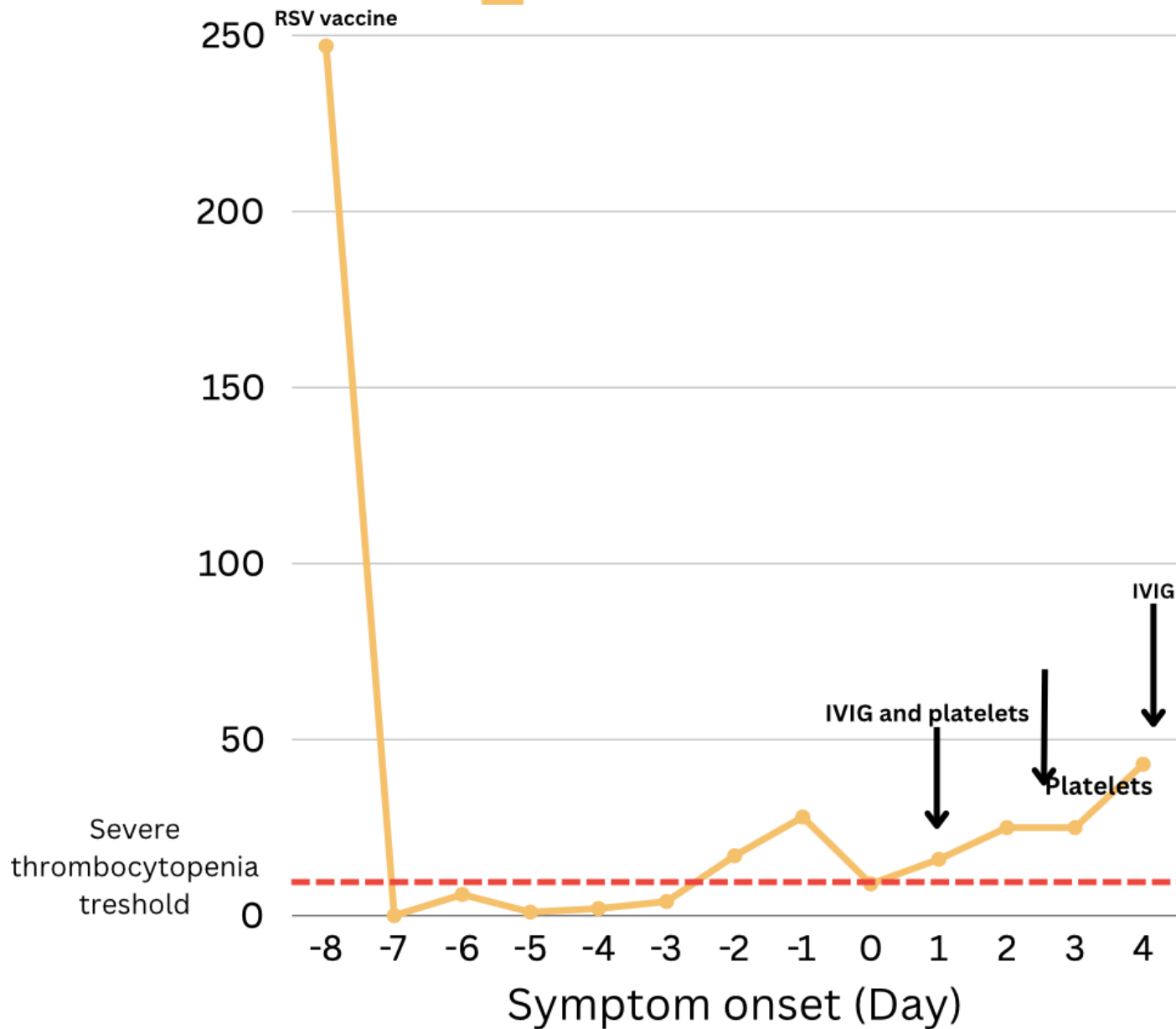
- Pre-eclampsia (1.8%)
- Gestational hypertension (1.1%)
- Premature rupture of membranes (0.4%)
- Preterm premature rupture of membranes (0.4%)
- Hypertension (0.4%)
- Maternal death (<0.1%)
- Fetal death (0.3%)

Medication-induced thrombocytopenia in pregnancy is rare (<1%) and frequently caused by trimethoprim/sulfamethoxazole and quinine.

We report the first case of severe thrombocytopenia following RSV vaccination during pregnancy.

Platelet Count Response Following RSV Vaccination

■ Platelet Count ($\times 10^3/\mu\text{L}$)



Discussion

Case management of thrombocytopenic patients

- ❖ Given the severity of thrombocytopenia, determining mode of delivery requires a multidisciplinary approach involving hematology, MFM, anesthesia, and NICU.
- ❖ Cesarean deliveries:
 - GA
 - TEG/ROTEM
 - TXA
 - FFP, PLT
 - Cell saver
- ❖ Labor:
 - Neuraxial considerations
 - Remifentanyl PCA
- ❖ Other considerations: Fetal thrombocytopenia