Paroxysmal nocturnal hemoglobinuria and pregnancy- two case reports

Borislava Pujic[1] M.D., PhD, Sanja Milosev[1], M.D., Craig Palmer[2], M.D., Prof.
[1]CCV, Clinic for anesthesia, intensive care and pain therapy, Department of anesthesia Gyn & Obs Hospital, University of Novi Sad, Novi Sad, Serbia
[2]University of Arizona College of Medicine, Tucson, AZ

- Paroxysmal nocturnal hemoglobinuria (PNH) is a rare medical condition due to a genetic mutation, affecting 1-1.5 individuals per million
- PNH is acquired disorder, characterized with anemia, intravascular hemolysis, thrombotic events, thrombocytopenia and hemorrhage.
- We present the first two cases of PNH in parturients delivered during 2021 in our institution

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- **Case 1:** A 38y old, primip, 36+5 GW has been admitted with severe anemia and severe thoracic pain (at 32 wks she was diagnosed by hemathologist with PNH)
- PSH included laparoscopic surgery twice for ovarian cyst and hysteroscopic removal of a uterine polyp and suffering of anemia for 15y
- Multidisciplinary medical team ordered: meningococcal vaccine, and two weeks later Eculizumab IV the day before delivery
- CS in 39GW in GA (she was on LMWH in therapeutic dosage)
- Baby girl 3120g and 48cm was born, with APGAR 10/10
- The surgery and postoperative course were uneventful, second dose Eculizumab on POD 6, discharge on POD 7

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- **Case 2:** A 35y old, primip at 36+1 GW with preeclampsia and diagnosed with PNH 11yrs prior (twice treated with blood transfusion) and now has pancytopenia throughout pregnancy)
- At 32 GW she received meningococcal vaccine, 2 weeks later a 1st dose of eculizumab, followed by a 2nd dose one week later
- On admission: received PRBC transfusion, with platelet level 38,000/dl, on prophylactic LMWH dose
- Before CS: platelet concentrate transfusion, CS under GA at 37 GW
- baby boy, 3240g and 50cm was born with APGAR scores 5/8
- Postop: 2nd PRBC transfusion, discharge at POD 7
- **Conclusion:** In this rare condition multidisciplinary management between obstetricians, anesthesiologists and hematologists is essential for successful pregnancy outcomes.
- **Literature:** 1. Brodsky RA. *Blood* (2014) 124 (18): 2804–2811.