

IMPACT OF GESTATIONAL THROMBOCYTOPENIA ON PREVALENCE OF POSTPARTUM HEMORRHAGE AND BLOOD TRANSFUSION

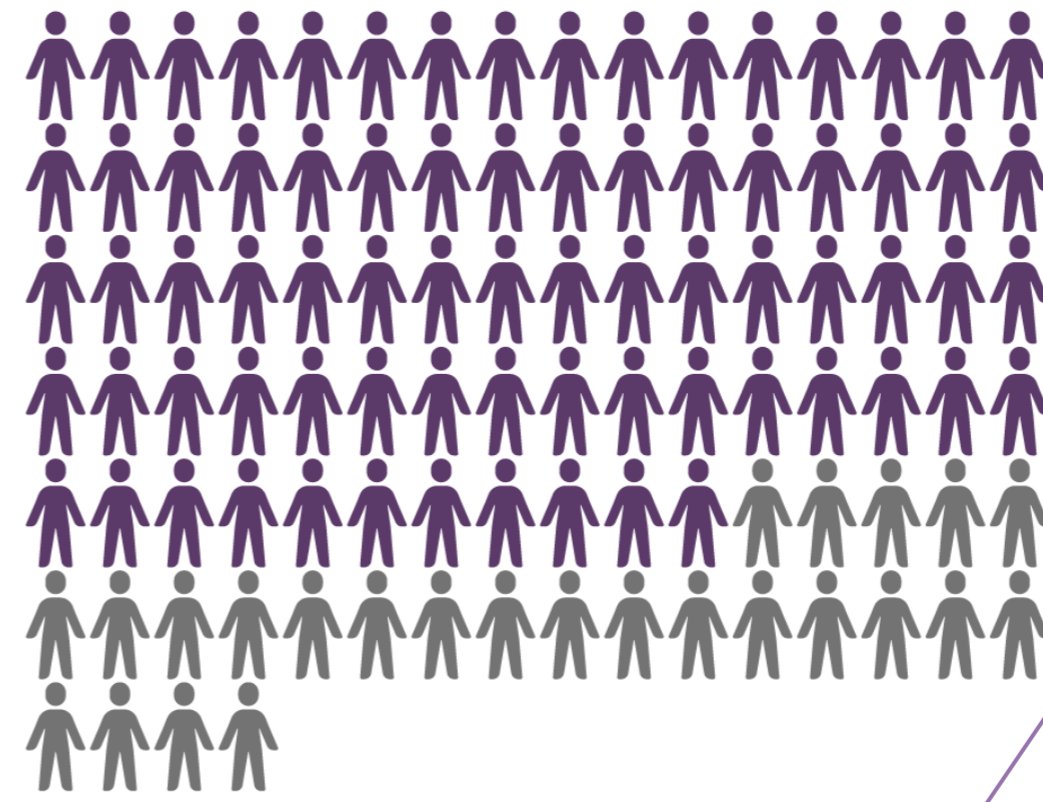
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INTRODUCTION

Gestational thrombocytopenia is the second most common hematological pathology in pregnancy after anemia, affecting approximately 9 million women each year [1].

The American Society of Hematologists define gestational thrombocytopenia as a condition directly related to pregnancy when the platelet count of the pregnant woman is $<150 \times 10^9/l$ and other conditions causing thrombocytopenia are excluded [2].

Blood loss during a caesarean section is usually greater compared to vaginal delivery, which may be further increased in the case of severe thrombocytopenia. The risk of spontaneous bleeding is increased if the platelet count is $<20 \times 10^9/l$ [4].



Thrombocytopenia degrees

Mild
(platelet count $150-100 \times 10^9/l$)

Moderate
(platelet count $100-50 \times 10^9/l$)

Severe
(platelet count $<50 \times 10^9/l$)

AIM

To compare prevalence of postpartum hemorrhage and blood transfusion between women with gestational thrombocytopenia and control group.

METHODS

402 case-histories of women who delivered in the Hospital of LSMU Kaunas Clinics in the period of 2010-2020

The case group (G1) – 181 women with gestational thrombocytopenia

The control group (G2) – 221 randomly selected women

Patients were selected based on the prevalence of GT diagnosis from the Delivery department register database (bioethics approval No. BEC-MF-69).

Inclusion criteria for case group - platelet count $<150 \times 10^9/l$ and no thrombocytopenia-related syndrome or disease. 18 women initially placed in control group based on the absence of GT diagnosis had platelet count $<150 \times 10^9/l$ and were excluded from the study. For statistical analysis, Chi-square and Student T test were used. Data analysis was performed using SPSS version 26.0. Results were considered significant at $p < 0.05$.

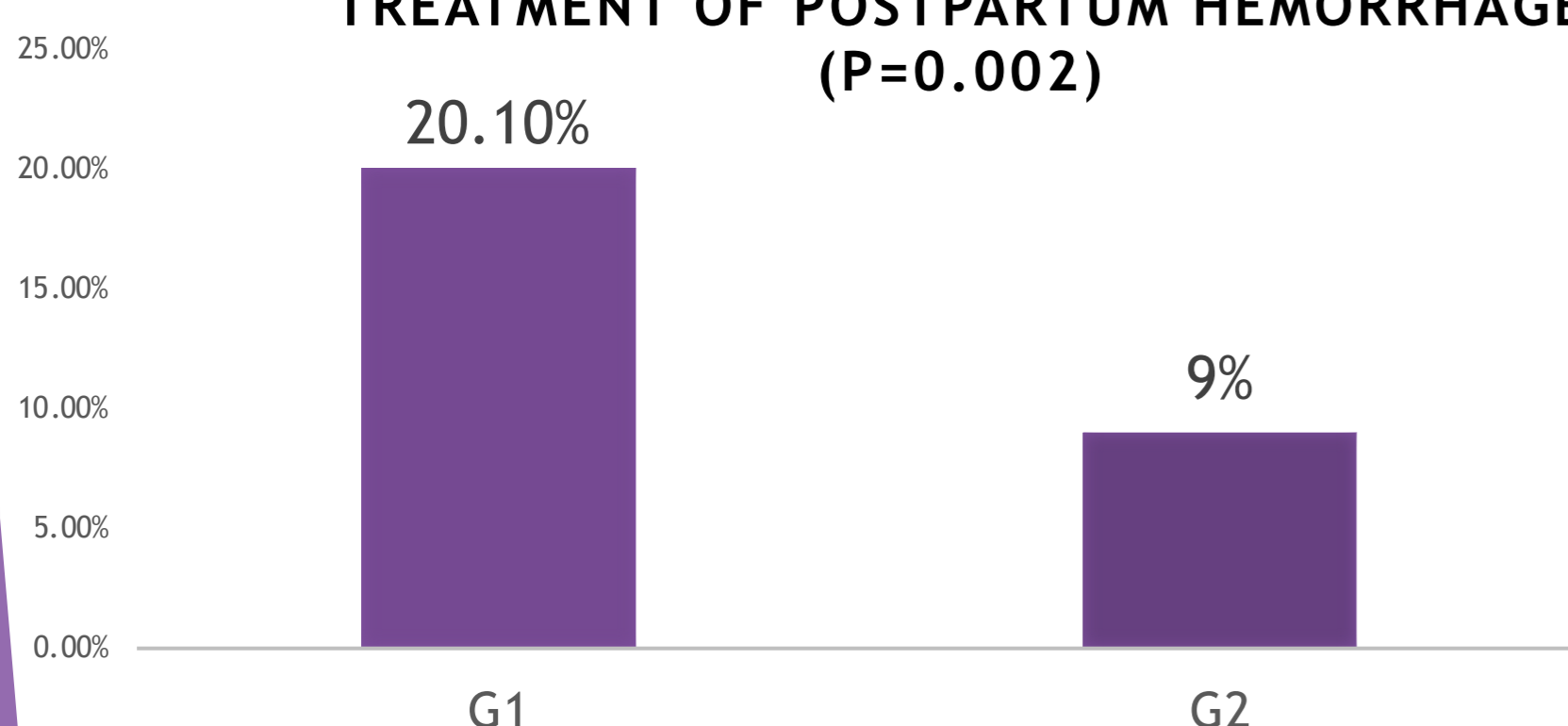
RESULTS

There were a total of 35400 deliveries in the Hospital of LSMU Kaunas Clinics during the study period.

The average age of women (G1 $29,36 \pm 5,30$ vs. G2 $29,90 \pm 5,54$; $p=0.320$), gestational age (G1 $38,88 \pm 1,9$ vs. G2 $38,72 \pm 2,12$; $p=0.343$), newborn weight (G1 3486.59 ± 629.98 vs. G2 3591.52 ± 2378.381 , $p=0.753$) did not differ in both groups.

Twin pregnancies were statistically more common in G1 $p=0.021$.

MISOPROSTOL USE FOR PROPHYLAXIS AND TREATMENT OF POSTPARTUM HEMORRHAGE
($P=0.002$)



Postpartum haemorrhage
($p=0.155$)

G1 12 women
(1 – mild, 11 – moderate thrombocytopenia)

G2
7 women

There were no cases of polyhydramnios. In the analysis of the causes of postpartum hemorrhage, uterine atony was similar in both groups ($p=1.00$), placental abruption occurred only in the G2 ($p < 0.05$).

Blood transfusions
($p=0.02$)

G1
8 (4.42%) women
(7 – moderate, 1 - severe thrombocytopenia)

G2
0 (0.0%) women

CONCLUSIONS

There was no statistically significant difference between the groups regarding postpartum hemorrhage, however blood transfusion, treatment with misoprostol was performed more frequently in G1.