

The value of C-reactive protein in the prediction of preeclampsia

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Objective

Preeclampsia is a hypertensive disorder that occurs in 4-5% of pregnant patients and is the cause of significant maternal and fetal morbidity and mortality. C reactive protein is considered a sensitive inflammatory marker and its values increase in response to inflammation that occurs during tissue injury. The level of C reactive protein increases, correlating with the severity of the clinical picture of preeclampsia. To determine the value of C reactive protein in patients with preeclampsia and the correlation of the value with the severity of the clinical picture of preeclampsia.

Methods

This study included 15 patients with moderate form of preeclampsia, 15 patients with severe form of preeclampsia and 15 patients without symptoms, with normal pregnancy. All patients are in the third trimester of pregnancy, hospitalized at the University Clinic for Gynecology and Obstetrics, Skopje, in the Department of Preeclampsia, intrauterine growth retardation and premature births. The patients were examined in the period from 01.10.2022-10.04.2023. The severity of preeclampsia is determined by blood pressure, 24-hour proteinuria, and angiogenic factors.

Results

The obtained results show that the increased levels of CRP are statistically significant ($p < 0.001$) in the serum of patients with a moderately severe form of preeclampsia (group A) (mean value 8.4; 6.1-11.3mg/L) and severe form of preeclampsia (group B) (mean value 30.2; 13-54mg/L) in correlation with the control group (group C) (mean value 2.5; 0.2-4.5mg/L). There is a significant correlation between serum CRP values and systolic blood pressure ($p < 0.001$) and proteinuria ($p < 0.001$). There are increased values of CRP in patients with preeclampsia.

Conclusion

High values of serum CRP values correlate with the severity of the clinical picture of preeclampsia. Key words: CRP, Preeclampsia, blood pressure.