

VALUE OF HAEMATOLOGICAL AND SERUM BIOCHEMICAL PARAMETERS IN THE PREDICTION OF PERINATAL OUTCOME IN PREECLAMPSIA

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Preeclampsia is a serious disorder characterized by a generalized maternal inflammatory response associated with diffuse endothelial cell dysfunction. Preeclampsia has a long preclinical phase before it manifests. The possibility of predicting complications in preeclampsia is clinically very significant, as it could contribute to the reduction of maternal and neonatal morbidity and mortality. The aim of this study was to examine whether haematological and serum biochemical parameters may be of use in predicting more severe clinical picture and worse perinatal outcome in preeclampsia.

The prospective observational study included the study group consisted of 30 singleton pregnancies with preeclampsia completed by caesarean section (CS). This study group was divided into two subgroups with respect to severity of preeclampsia (mild and severe). The control group consisted of 20 healthy pregnant women delivered by elective CS. Clinical characteristics of pregnant women, haematological and serum biochemical parameters, as well as perinatal outcome were analyzed. In preeclampsia, the higher values of hematocrit and hemoglobin are noted, and lower platelet count, as well as the higher values of aspartate aminotransferase (AST), alanine aminotransferase, lactate dehydrogenase (LDH), gammaglutamyl transferase, cholesterol, triglycerides, uric acid, urea and creatinine. Laboratory parameters associated with a severe clinical picture of preeclampsia in our study, as well as with a worse perinatal outcome were thrombocytopenia and increased AST and LDH levels. However, despite being indicators of a poorer outcome, they cannot be used with absolute certainty and in isolation from other indicators to predict poor perinatal outcome in preeclampsia. Deciding the delivery time in relation to an expectative approach should be based on a comprehensive consideration of gestational age, fetal condition, clinical and laboratory maternal indicators.

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