

## THE ROLE OF CARDIOTOCOGRAPHY IN ASSESSING THE CONDITION OF A FETUS IN PREECLAMPSIA

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The role of cardiotocography (CTG) in preeclampsia is still vaguely defined. The aim of this study was to investigate the possible role of CTG in assessing the condition of the fetus in preeclampsia with and without intrauterine growth retardation (IUGR) and to compare the CTG findings with Doppler parameters and perinatal outcome. The prospective study included 30 singleton pregnancies with preeclampsia completed by caesarean section. The study group was divided into subgroups based on the presence of IUGR in relation to the severity of preeclampsia. The control group consisted of 20 healthy women delivered by elective caesarean section. In 53.3% of preeclamptic cases, cardiotocographic findings differed from normal ( $p < 0.001$ ) and they were either warning or pathological. There were no significant differences in the presence of a pattern deviating from normal based on the severity of preeclampsia, and it was significantly more prevalent in preeclampsia with IUGR ( $p < 0.01$ ) than the one without it. The prevalence of CTG pattern types in the study group was significantly altered by presence of oligoamnion ( $p < 0.05$ ) as well as the parameters of the flow through the uterine arteries, umbilical artery and middle cerebral artery ( $p < 0.05$ ). Apgar score significantly depends on the CTG findings and decreases with the unfavourable CTG pattern.

CTG and Doppler ultrasonography complement each other in order to improve perinatal outcome in preeclampsia. CTG is irreplaceable as a first measure of rapid assessment of the fetal condition in newly diagnosed cases of preeclampsia, aiming also to and in order to detect complications from umbilical cord during its follow-up. *Acta Medica Medianae* 2015;54(2):41-47.

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