

Abstract:

Pre-eclampsia (PE) is a serious multi-organ disease complicating pregnancy. It occurs in 2-8% of pregnancies worldwide and approximately 50,000 women die from its consequences each year. This bachelor's thesis summarizes the theoretical knowledge of PE, specifically the etiopathogenesis, classification and symptoms of the disease, treatment management, likely complications and other aspects that are important in nursing care.

The practical part of the thesis deals with the use of serum creatinine (S-creatinine) levels to determine the severity of the patient's condition and the likely consequences for the foetus. The main objective of the thesis was to find a correlation between maternal S-creatinine levels prior to delivery and perinatal outcomes. The sub-objective was to monitor serum urea (S-urea) levels in relation to the length of pregnancy. Our hypothesis was that as the mother's antepartum S-creatinine level increases, the length of gestation shortens, newborn birth weight decreases, postpartum adaptation worsens, and the length of maternal hospitalization increases. To perform the research, we retrospectively collected data from pregnant women with a PE diagnosis who gave birth at the Department of Obstetrics and Gynaecology of the First Faculty of Medicine of Charles University and of the General University Hospital in Prague in 2020.

From the studied data, we observed that high S-creatinine level negatively correlates with gestational duration, birth weight of the newborn and the APGAR score at the 5th minute of life and positively correlates with the duration of maternal hospitalisation. Due to the small sample size of patients, we cannot declare the results significant. The negative correlation between high levels of S-urea and the length of gestation was found to be the most statistically significant result drawn from our data, and monitoring S-urea in women with PE is the greatest contribution of this study.

Keywords: Pre-eclampsia, Pregnancy, Creatinine, Nursing Care, Low birth weight