ABSTRACTS OF E-POSTERS

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Relationship between the Blood Pressure and Serum Uric Acid Levels in Pregnant Women

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Introduction and Objectives

Exploring the intricate interplay of serum uric acid and blood pressure offers critical insights into pregnancy-related hypertensive disorders. This study was conducted to determine whether if there is a statistically significant correlation between blood pressure and serum uric acid levels in pregnant women.

Methods

All the selected subjects were included and there were no dropouts. Study showed a significant positive correlation between serum uric acid levels with both systolic ($r=0.864$, $p<0.001$) and diastolic ($r=0.739$, $p<0.001$) blood pressures. In addition, statistically significant ($p<0.001$) positive correlation was observed between serum uric acid levels and systolic blood pressure among those with different body mass index (BMI) categories (underweight; $r=0.955$, normal; $r=0.910$, overweight; $r=0.817$, obesity; $r=0.721$) and gestational weeks (trimester) (second; $r=0.780$, third; $r=0.878$). Meanwhile, similar statistically significant ($p<0.001$) positive correlations between serum uric acid levels and diastolic blood pressure among different BMI categories (underweight; $r=0.867$, normal; $r=0.625$, overweight; $r=0.772$, obesity; $r=0.650$) and gestational weeks (trimester) (second; $r=0.809$, third; $r=0.730$) were observed.

Conclusions

Robust and significant positive correlations between serum uric acid with both systolic and diastolic blood pressures were observed. This suggests that uric acid can be used as a predictor of hypertensive disorders of pregnancy like pre-eclampsia in a wide range of pregnant women regardless of their characteristics like BMI and gestational period.

Keywords

Pregnant women, Serum uric acid, Systolic and diastolic blood pressure, Gestational period