Serum uric acid levels and risk of developing preeclampsia [Niveles de ácido úrico sérico y riesgo de desarrollar preeclampsia]

Corominas A.I.

Balconi S.M.

Palermo M.

Maskin B.

Damiano A.E.

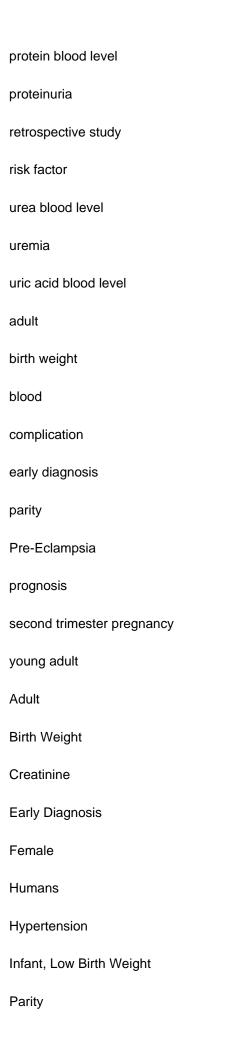
It is well known that preeclampsia is associated to high uric acid levels, but the clinical assessment of this relationship is still under consideration. Our research was to evaluate if periodic doses of uric acid during pregnancy might help to identify a high risk group prior to the onset of preeclampsia. We conducted a retrospective investigation in 79 primary gestates with normal blood pressure and 79 women with preeclampsia who were assisted at Hospital Nacional Posadas during 2010. Serum uric acid levels, creatininemia, uremia, and proteinuria data from the clinical records of the pregnant women were considered. Uric acid levels were similar in both groups during the first half of gestation. However, as of the 20th week, uric acid increased 1.5-times in preeclamptic women with no changes in creatinine and urea, confirming that these patients had no renal complications. Furthermore, we noted that higher levels of uric acid correlated with low birth weight. We also observed that pregnant women with a family history of hypertension were more likely to develop this condition. Moreover, we did not find a direct relationship with the fetal sex or the appearance of clinical symptoms. The analytical evidence suggests that changes in uric acid concentrations may be due to metabolic alterations at the initial stages of preeclampsia. Therefore, we propose that monitoring levels of uric acid during pregnancy might contribute to the early control of this condition. © 2014, Instituto de Investigaciones Medicas. All rights reserved.

Gestation

Preeclampsia

Uric acid

creatinine
protein
urea
uric acid
creatinine
urea
uric acid
abnormally high substrate concentration in blood
Article
blood pressure
clinical feature
controlled study
creatinine blood level
creatininemia
evaluation study
family history
female
gestational age
high risk population
human
hypertension
low birth weight
major clinical study
preeclampsia
pregnancy
pregnant woman



Pre-Eclampsia
Pregnancy
Pregnancy Trimester, Second
Prognosis
Retrospective Studies
Risk Factors
Urea
Uric Acid
Young Adult