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THE ROLE OF ISCHEMIC MODIFIED ALBUMIN BIOMARKERS AND AUTOANTHIBODES AGAINST ANGIOTENSIN II TYPE 1 RECEPTOR IN THE PREDICTION OF PREECLAMPSIA

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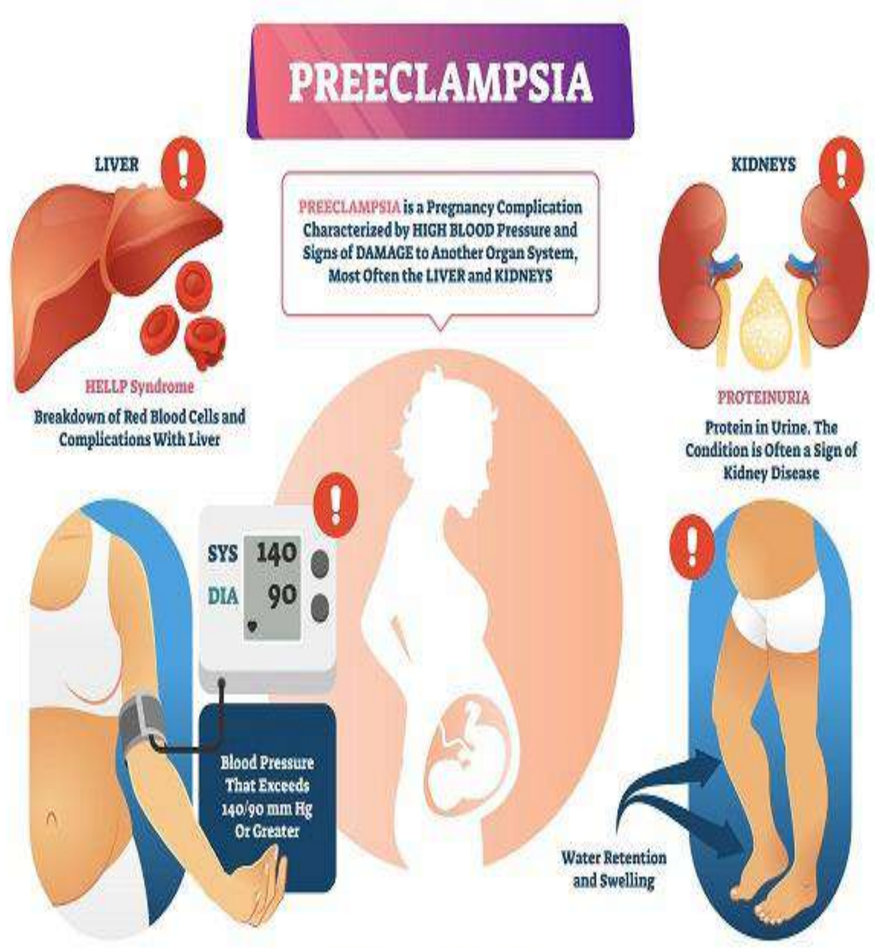
Introduction: Oxidative stress and hypoxic ischemic status have an important role in the pathogenesis of preeclampsia. Elevated serum levels of biomarkers ischemic modified albumin (IMA) and autoantibodies against angiotensin type II receptor 1 (AT1AA) may be associated with the severity and prediction of preeclampsia.

Purpose: Establishing the role of biomarkers IMA and AT1AA in the prediction of preeclampsia, according to data from the international literature.

Material and methods: To accomplish this work, searches were performed in the Cochrane, PubMed, Medline databases, for studies published in 2015-2020, and included 38 articles analyzing the role of IMA and AT1AA biomarkers in the prediction and pathogenesis of preeclampsia.



Results: Analysis of recent studies showed that serum levels of AMI and AT1AA were significantly increased in preeclampsia. Elevated AT1AA values and a threshold above (56.84 ± 11.57 ng / ml) are reported for IMA associated with preeclampsia. Pathological changes in AT1AA and AMI, occurring in oxidative stress and endothelial dysfunction in preeclampsia, could mediate the development of cardiovascular disease and autoimmune processes later in life in women with preeclampsia.

Conclusions: Following the analysis of the selected articles, it was found that the increase in serum concentrations of AMI and AT1AA may be associated with preclampsia, so testing these biomarkers may be useful in assessing the severity and prediction of preeclampsia.

Keywords: preeclampsia, AT1AA, IMA.