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Increased Oxidative Stress and Cytokinesis-block Micronucleus Cytome Assay

Parameters in Pregnant Women with Gestational Diabetes Mellitus and Gestational

**Arterial Hypertension** 

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#### Research Highlights:

- Gestational hypertension and gestational diabetes induce oxidative stress.
- Gestational hypertension and gestational diabetes increase level of DNA damage.
- Methyldopa has no genotoxic effect.
- CBMNcyt assay can be used as valuable screening test for pregnancy complications.

#### **ABSTRACT**

We investigated whether gestational diabetes mellitus (GDM) and gestational arterial hypertension (GH) are associated with increased oxidative stress and DNA damage. Study included 3 groups of pregnant women (GDM, GH and control). DNA damage biomarkers (micronuclei MNi, nucleoplasmic bridges NPBs and nuclear buds NBUDs) were assessed by cytokinesis-block micronucleus cytome assay. Oxidative stress levels were evaluated by

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