

GESTATIONAL DIABETES AND NON-ALCOHOLIC FATTY LIVER DISEASE

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Background:

Gestational diabetes mellitus (GDM) is glucose intolerance first identified during pregnancy. During this period, there is increased physiological stress in the mother due to higher metabolic demands, which can cause insulin resistance and hyperglycemia. Nonalcoholic fatty liver disease (NAFLD) is a prevalent disease associated with metabolic syndrome and insulin resistance.

Objective:

The aim of this study was to evaluate the association between GDM and NAFLD.

Methods:

A systematic literature review was conducted following the PRISMA guidelines. Papers were selected searching PubMed/Medline, SciELO and

LILACS databases in October 2021 using the terms [Gestational Diabetes] AND [NAFLD]. The inclusion criterion was limited to observational studies that evaluated the association between GDM and NAFLD. There were no language or publication date restrictions.

Results:

Among the 57 studies initially identified, 6 were included in this systematic review. Type 2 diabetes mellitus, insulin resistance, and obesity are well-established risk factors shared by GDM and NAFLD. The studies have shown that patients with NAFLD are at higher risk of developing GDM. The increased risk is associated with the severity of steatosis and steatohepatitis. NAFLD can be associated with relevant obstetric morbidity, especially among non-obese women. NAFLD should be considered a high-risk obstetric scenario, demanding proper management and pre-pregnancy counseling.

Conclusions:

NAFLD is positively associated with GDM. Patients with NAFLD are at higher risk of developing GDM and can have relevant maternal morbidity.

Keywords:

Gestational diabetes, Nonalcoholic fatty liver disease.

Abbreviations :

Gestational diabetes mellitus (GDM); Nonalcoholic fatty liver disease (NAFLD); Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA). Funding and Conflicts of Interest This study has not funding and no conflicts of interest.