A meta-analysis of the prevalence of gestational diabetes in patients diagnosed with obstetric cholestasis.

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Abstract

Objective To determine the prevalence of gestational diabetes in women with obstetric cholestasis. Design Systematic review and meta-analysis of data published since 2010. Selection Observation studies with quantifiable data. Sample A total of 16748 patients with obstetric cholestasis from 21 studies were included. Methods A pre-defined protocol with extensive literature search plus other sources to obtain all possible articles was followed. All articles were evaluated and included in the study with specified criteria for the risk of bias using the Newcastle Ottawa Score. A meta-analysis was performed with MOOSE specifications met. Main Outcome measure Prevalence of gestational diabetes in the obstetric cholestasis population. Results The prevalence of gestational diabetes in the obstetric cholestasis population was 13.9% (20 studies analysed). Gestational diabetes was seen more in the obstetric cholestasis group compared to the non-obstetric group (OR 2.129, 95%CI, 1.697 to 2.670,10 studies). Severe cholestasis has more gestational diabetes cases (OR 2.168, 95% CI, 1.429 to 3.289, 4 studies) compared to mild cholestasis. Conclusion There is a significant co-relation of gestational diabetes among the diagnosed obstetric cholestasis population. With a diagnosis of obstetric cholestasis is made, it is necessary to test for undiagnosed gestational diabetes further. This approach may reduce the risk of stillbirth in severe obstetric cholestasis cases. PROSPERO Registration number CRD42021223886

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