ABSTRACT

With diabetes on the rise worldwide, an increasing number of pregnant women are dealing with the associated complications. The most common complication is macrosomia, or large for gestational age (LGA), which can lead to detrimental adverse effects for both the mother and the baby. In conjunction with glycated hemoglobin (HbA1c) measurement, using continuous glucose monitoring systems (CGM) can improve glycemic control. This systematic review evaluates the recent literature to determine if the birth weight of infants born from mothers with diabetes can be improved while using CGMs in comparison to self-blood sugar checks. The interventional group of all three studies reviewed demonstrated a decreased birth weight for the babies born from women using the CGMs.

INTRODUCTION

Diabetes is on the rise worldwide, including among pregnant women.

Diabetic pregnancies are classified as

which

may cause (Murphy et al, 2008):

Macrosomia (50%, most common)

Preterm birth

Birth defects

Stillbirth

Macrosomia and LGA cause high risk

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DISCUSSION & CONCLUSIONS

Study #1 demonstrated that CGM usage caused decreased HbA1c measurements, average fetal birth weight, and median birth weight percentiles.

Study #2 showed CGM users had a slight decrease in their HbA1c but considerable

adverse events were less likely to occur for CGM users.

Study #3 showed CGM users have lower

decreases risk of macrosomia. Recommend to all women with diabetes who are pregnant or planning a pregnancy.

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