

Impact of Gastric Bypass Surgery during Pregnancy on Fetal Growth Parameters

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Abstract

Background: Gastric bypass surgery (GBS) is a common bariatric procedure for obesity management. However, its safety and efficacy during pregnancy remain unclear. This review examines the impact of GBS on fetal growth parameters, including birth weight, gestational age at delivery, and the prevalence of small for gestational age (SGA) infants. The review also discusses potential complications and the need for further research.

Keywords: Gastric bypass surgery, pregnancy, fetal growth, SGA, bariatric surgery.

Introduction

Obesity is a global health concern, and bariatric surgery, including gastric bypass, is increasingly performed. While the benefits of weight loss are well-documented, the impact of these procedures on pregnancy outcomes is less understood. This review focuses on the effects of GBS on fetal growth parameters, a critical aspect of maternal and fetal health.

Methods

The review synthesizes data from various studies, including cohort studies and clinical trials, to evaluate the relationship between GBS and fetal growth. Key parameters analyzed include birth weight, gestational age at delivery, and the prevalence of SGA infants.

Results

Several studies have shown that GBS is associated with a higher risk of SGA infants compared to non-surgical pregnancies. This finding is consistent across different populations and study designs. Additionally, some studies have reported lower birth weights and shorter gestational durations in pregnancies involving GBS.

Discussion

The observed association between GBS and SGA infants suggests potential nutritional deficiencies or altered nutrient absorption following the procedure. These factors may impact fetal growth and development. Further research is needed to elucidate the underlying mechanisms and to develop strategies to mitigate these risks.

Conclusion

While GBS offers significant benefits for obesity management, its use during pregnancy requires careful consideration. The potential for adverse fetal growth outcomes highlights the need for close monitoring and specialized care for pregnant women who have undergone GBS.

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60)infants were assessed and compared to expected norms for nonsurgical pregnancies.

such as nutritional deficiencies and postoperative outcomes were also considered. Results indi

e.g., differences in birth weight, rates of SGA between pregnancies with gastric bypass surgery and

intervention. Factors such as timing of surgery relative to gestational age, maternal nutrition

complications were evaluated as potential influencers on fetal growth. These

Abstract

Introduction: Gastric bypass surgery (GBP) is a common bariatric procedure for obesity management. However, its impact on fetal growth parameters during pregnancy remains unclear. This study aims to evaluate the effect of GBP on fetal growth parameters, including birth weight, length, and head circumference, compared to a control group.

Methods: A retrospective analysis of medical records from a tertiary care center was conducted. The study included 100 pregnant women who underwent GBP before pregnancy and 100 pregnant women who did not undergo any bariatric surgery. Data on fetal growth parameters were collected from ultrasound examinations and birth records.

Results: The GBP group showed significantly lower birth weight ($p < 0.05$) and length ($p < 0.05$) compared to the control group. There was no significant difference in head circumference between the two groups. The GBP group also had a higher rate of fetal growth restriction (FGR) compared to the control group.

Conclusion: GBP during pregnancy is associated with lower fetal birth weight and length, and a higher rate of FGR. Further research is needed to explore the underlying mechanisms and potential interventions to improve fetal growth outcomes in this population.

Keywords: Gastric bypass surgery, pregnancy, fetal growth parameters, birth weight, length, head circumference, fetal growth restriction.