



Early Pregnancy (≤ 12 Months) After Bariatric Surgery: Does It Really Influence Maternal and Perinatal Outcomes?

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Disclosure

None



Backgrounds

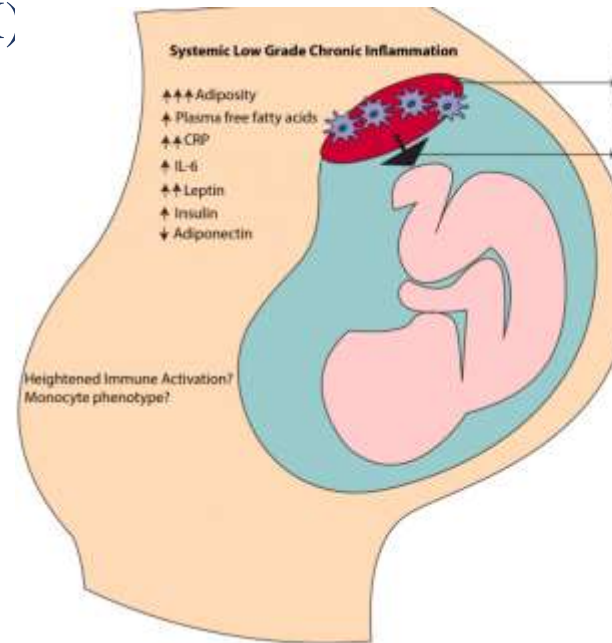
Obesity during pregnancy elevates the risk of health complications for both the mother and the baby (Marchi J 2015)

Maternal risks

- Gestational diabetes mellitus (GDM)
- Gestational hypertension (GH)
- Preeclampsia
- Spontaneous miscarriage
- Postpartum hemorrhage
- Cesarean section

Neonate risks

- Macrosomia
- Premature birth
- Large for gestational age
- Birth defect
- Meconium aspiration



Systematic Reviews

Maternal and neonatal outcomes after bariatric surgery; a systematic review and meta-analysis: do the benefits outweigh the risks?

Wilson Kwong, MD; George Tomlinson, PhD; Denice S. Feig, MD

Gestational Diabetes
Gestational Hypertension
Preeclampsia
Thromboembolism

Macrosomia
Fetal Anomalies
Infertility
Intrauterine Growth Restriction

C-section
Wound Infections

Bariatric surgery can
**reduce the risk of adverse
obstetric outcomes**

Backgrounds

When is the optimum time for pregnancy after bariatric surgery ?



- BOMSS, ASMBS recommend that **patients avoid pregnancy for 12 - 18 months after surgery**
- ACOG --12 - 24 months
- Lack of consensus and evidences

Objectives



- To evaluate the influence of **early pregnancy (≤ 12 months)** after bariatric surgery on maternal and perinatal outcomes.

Methods



Systematic Reviews and **Meta-Analysis**



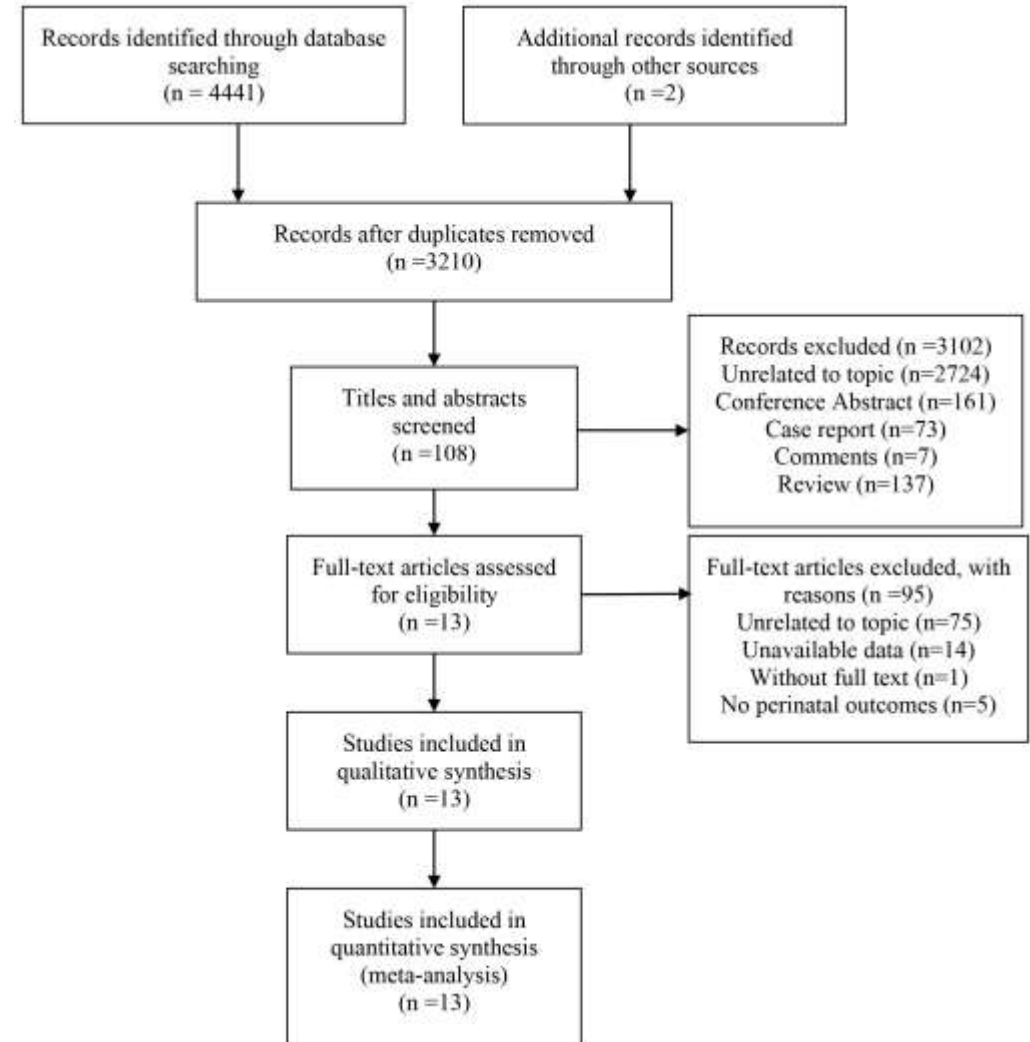
Patients underwent bariatric surgery having maternal and perinatal outcomes



Literature search from Jan 1 2000 to Aug15 2021

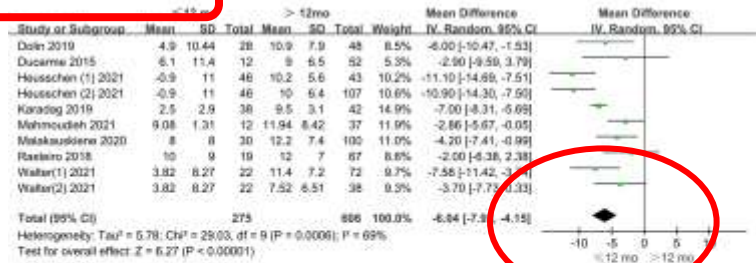


13 studies were included



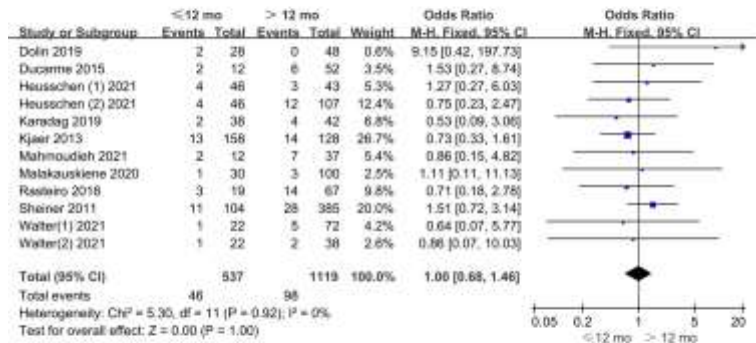
Results: Meta-analysis of Maternal Outcomes

2.1 Weight gain

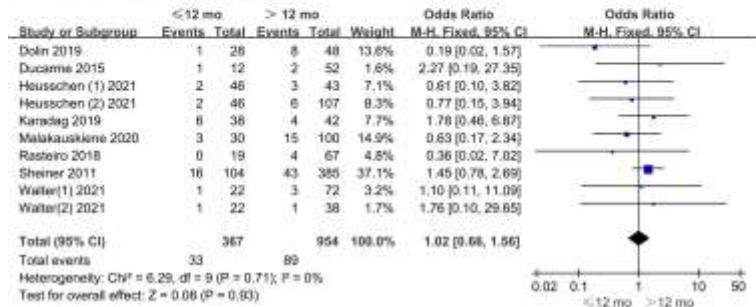


Early pregnancy was associated with a reduction in **weight gain** during pregnancy

2.2 Gestational diabetes mellitus



2.3 Gestational hypertension



Maternal outcomes

Weight gain

Gestational diabetes

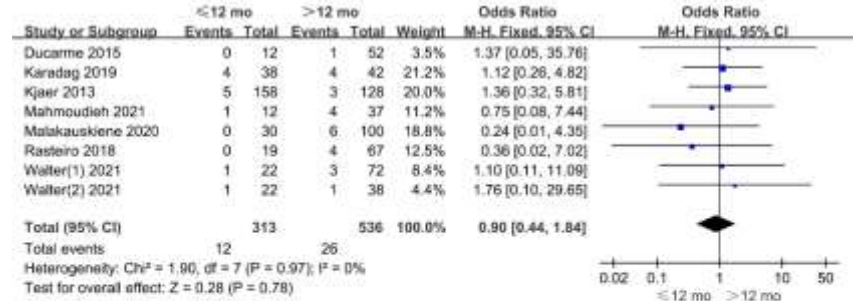
Gestational hypertension

Preeclampsia

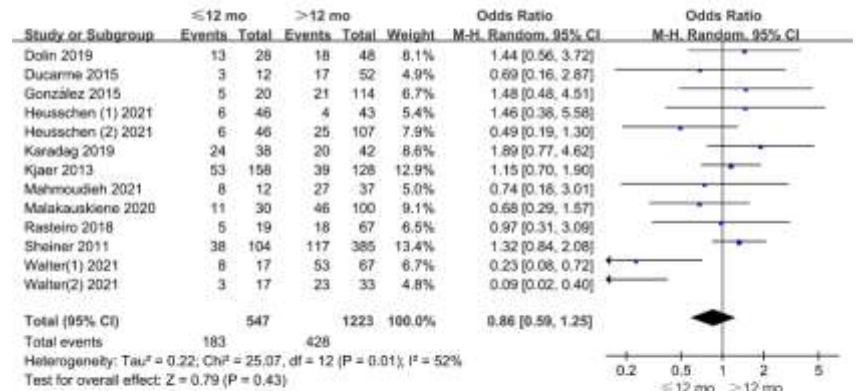
Caesarean section

Postpartum hemorrhage

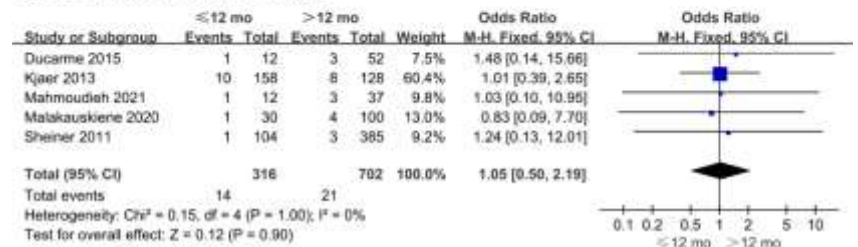
2.4 Preeclampsia



2.5 Caesarean section



2.6 Postpartum hemorrhage

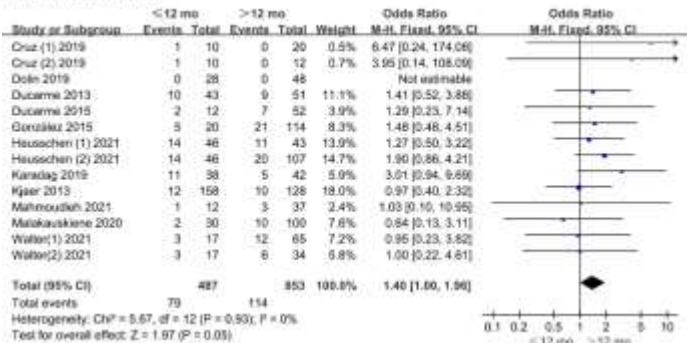


Results: Meta-analysis of Neonatal Outcomes

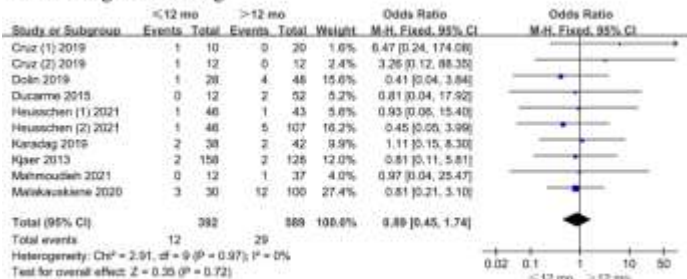
The result showed no significant difference between the two groups regarding **preterm birth, small gestational age, large gestational age, birth defects, neonatal intensive care unit admission and Apgar score ≤ 7 within 5 min**

- Neonatal outcomes
- Preterm birth
 - SGA
 - LGA
 - Macrosomia
 - Birth defect
 - NICU admission
 - Apgar ≤ 7 within 5 min

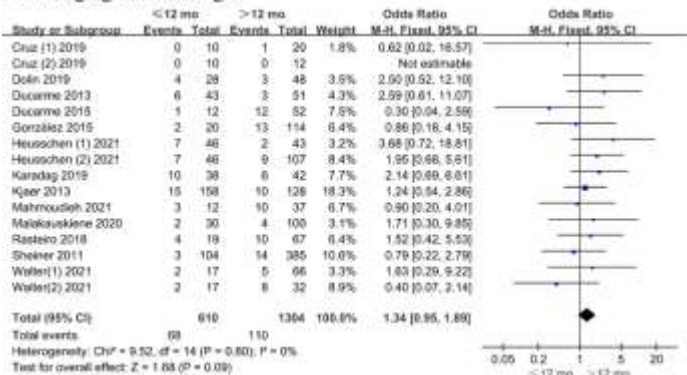
3.1 Preterm birth



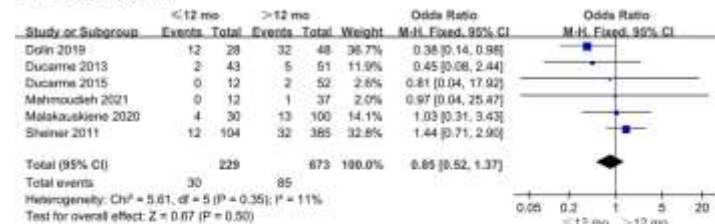
3.2 Small gestational age



3.3 Large gestational age



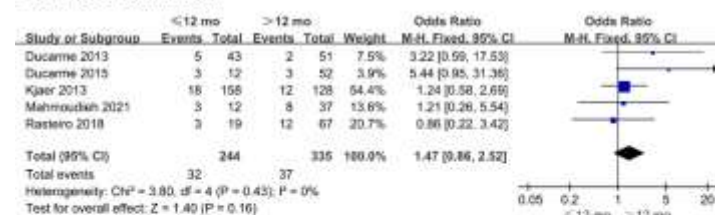
3.4 Macrosomia



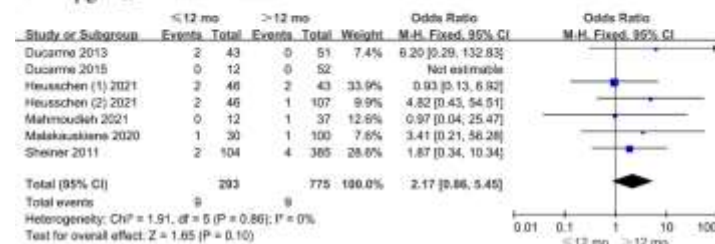
3.5 Birth defect



3.6 NICU admission



3.7 Apgar ≤ 7 within 5 min



Discussions

- Early unintended pregnancy (≤ 12 mo or ≤ 6 mo) , extremely ≤ 3 mo , abortion or close prenatal monitoring?
- Women with fertility issues or those nearing the end of their reproductive age after surgery: fixed intervals or personalized approach?
- Growth and development of the infant for the long-term

Extremely early pregnancy (<6 mo) after sleeve gastrectomy: maternal and perinatal outcomes

Amihai Rottenstreich, M.D.^{a,*}, Gabriel Levin, M.D.^a, Tair Ben Porat, R.D., M.P.H.^b,
Misgav Rottenstreich, M.D.^c, Raanan Meyer, M.D.^d, Ram Elazary, M.D.^e

Conclusions: Pregnancy occurring in the first 6 months after LSG was independently associated with a higher rate of SGA infants. Delaying conception during the very early postoperative period is recommended. Providing adequate contraception and excluding the presence of early pregnancy at the time of surgery are of utmost importance. (Surg Obes Relat Dis 2021;17:356–362.) © 2020 American Society for Bariatric Surgery. Published by Elsevier Inc. All rights reserved.

Conclusions

- ◆ Early pregnancy (within 12 months) has been linked to **insufficient gestational weight gain**, but there appear to be no significant adverse effects on maternal and perinatal outcomes.
- ◆ Avoid getting pregnant within **12 to 18 months** following surgery.
- ◆ The potential impact on **the future growth and development** of the infant remains uncertain and requires further studies.
- ◆ In the event of a pregnancy, thorough monitoring and management are crucial. If any abnormalities are detected, **termination of the pregnancy** might be necessary.
- ◆ The approach to pregnancy after bariatric surgery should be tailored to each individual patient's situation.



IFSO-APC Meeting 2023



SHENZHEN CHINA

8TH IFSO APC MEETING 2023

10TH CSMBS 2023

30th November - 2nd December, 2023
Shangrila-La Hotel Shenzhen, China



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Thank you !!!
Dr. Zhiyong Dong, dongzy2008@163.com

