

Need for evidence-based indications for CS delivery

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Implications for practice and research

- ▶ It is important for future clinical practice to understand the risks of Caesarean Section (CS) to properly counsel pregnant patients, even if the patient is obese.
- ▶ It would be crucial to have CS delivery indications that are accepted at national and international levels, even in obese women.

Context

According to the literature, it appears that obese pregnant women are more likely to undergo a caesarean section than non-obese women. However, the mechanisms underlying these data have not yet been clarified.

Methods

The aim of the study of Wyss *et al*¹ was to assess the factors contributing to the association between obesity and prepartum/intrapartum caesarean section. The study is a retrospective cohort study of 394 812 single, cephalic deliveries between 2005 and 2020. The outcome of the analysis was caesarean section and the exposure factor was obesity status (body mass index ≥ 30 kg/m²).

Other variables considered were and gestational comorbidities and gestation size, gestational age, duration of pregnancy >41/7 weeks, slow labour, induction of labour and a history of caesarean section.

Findings

Women with obesity have a caesarean section rate of 39.36% compared with 24.12% for women without obesity. The models explained up to 39.47% (95% CI: 36.92% to 42.02%) of the association between obesity and caesarean section and up to 57.13% (95% CI: 54.10% to 60.16%) when a history of caesarean section was included as a mediator in multiparous women. Slow labour and a history of previous caesarean sections were the most clinically significant mediators.

Commentary

Over the past decades, world CS' rates have increased; in fact, since 1985, the WHO issued that 'there is no justification for caesarean delivery rate higher than 10%–15%'—the rate that is associated with the lowest rates of maternal and infant mortality. Clinical indications to decide whether deliver vaginally a fetus exists, as, for example, Robson's Ten-Group Classification System,² but CS indications are non-unique and poorly applied.

It is important to underline that among CS indications there is not maternal obesity condition.³ Maternal obesity is a major health issue in most of the industrialised countries and the increasing rate of obesity among pregnant women has also increased studies about the correlation between maternal obesity and pregnancy complications such as hypertensive disorders, gestational diabetes and macrosomia⁴; moreover, a meta-analysis has reported an increased risk of caesarean delivery among overweight or obese women.⁵ Wyss *et al* evaluated the association between obesity and prelabour/intrapartum caesarean birth and the role of mediating processes. This study provides empirical insights into how obesity may increase caesarean birth rates through mediating processes.¹

The latest guidelines from the USA⁶ set indications for CS, but they never refer to the case of obese women. The fact that the higher number of caesarean sections happen in obese women could be related to the absence of adequate guidelines for obese women and to the higher risk of comorbidities which led to perform CS. Understanding deeply the risks and benefits of CS and having clear evidence-based CS indication will have practical implication for clinicians and patients.

However, to this day, regarding CS, the process of evidence-based practice that involves the five distinct steps (five As: ask a question, access the information, appraise the articles find, apply the information and audit impact) still lacks all the steps. It would be crucial to have CS delivery indications accepted at national and international levels and which should consider the situation of obesity in women.

Competing interests None declared.

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