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Short Communication

The Risk of Spontaneous Preterm Delivery in Pregnant Women with a History of Bariatric Surgery

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Received: February 11, 2017; **Published:** February 18, 2017

Bariatric surgery is a procedure that is increasingly being performed in women of reproductive age as it has been established to be an effective method of weight loss. Despite the growing body of evidence that women who have had bariatric surgery might have a higher risk of preterm birth when compared to women with similar body-mass index (BMI) and have not undergone bariatric surgery, there is still a paucity of conclusive data to guide antenatal counselling.

A large Swedish population-based cohort study in 2016 reported a significantly higher risk of spontaneous preterm birth among women who had bariatric surgery than controls that were matched for presurgery BMI, age, parity, smoking, and delivery year (5.2% vs 3.7%; p = 0.01) [1]. Results were also similar when analyses were restricted to women who were either nulliparous or had no history of preterm birth. The researchers in that study however concluded that despite careful matching, differences between the surgery group and the control group may have influenced their results.

Adjusting for potential confounding factors other than the ones reported in the Swedish study [1] which is the largest to date on this matter, might lead to different results in future studies and therefore change the evidence base direction.

There are reports that obesity has been associated with an increased risk of persistent cervical human-papilloma virus (HPV) infection, a fact that needs to be taken into account for the bariatric surgery arm of similar future studies [2]. Moreover, women attending colposcopy for abnormal cervical cytology even without having cervical treatment have a higher risk of preterm birth than the general population due to shared risk factors for preterm delivery and cervical disease [3], with a reported additional risk of preterm birth of 2.1 per 100 births [4]. If they receive cervical treatment this increases further their likelihood of preterm delivery depending on the depth of excision [5]. As a consequence 2.5% of all preterm births in England have been attributed to excisional treatments for cervical disease [5].

For these reasons, when performing a comparison of spontaneous preterm birth between the bariatric surgery and control group of such studies, the womens' cervical cytology and possible cervical treatment history should be included as potential confounding factors.

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Volume 4 Issue 2 February 2017