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Cesarean delivery associated with higher risk of severe complications for the mother

Cesarean delivery is associated with a higher risk of severe complications for the mother compared with vaginal delivery, especially in women aged 35 and older, according to new research published in *CMAJ (Canadian Medical Association Journal)*.

“These results have implications for clinical practice and will be useful in deciding the type of delivery,” says Dr. Diane Korb, an obstetrician and epidemiologist with the Robert Debre Hospital and INSERM, Paris, France. “Physicians must consider this increased risk when determining the best way to deliver, especially for older mothers.”

Rates of cesarean delivery have increased dramatically over the last 20 years, with more than 1 in 5 women delivering by caesarean, often for medically questionable reasons.

Although observational studies on cesarean delivery exist, the results may be influenced — confounded — by the health condition that required the cesarean rather than the surgical procedure itself.

“Maternal complications may be the result of the condition that led to the cesarean delivery rather than from the surgical procedure, producing an apparent association between cesarean delivery and maternal complications,” says Dr. Korb.

To understand if cesarean deliveries are associated with severe maternal complications, French researchers used a subcohort of a larger study (the EPIMOMS study) to compare 1444 women who experienced severe complications after delivery with 3464 controls who did not experience complications, in 6 French regions. They controlled for factors that might influence the findings and adjusted for baseline risk. They excluded women with pre-existing health conditions that could lead to complications.

The researchers found an increased likelihood of severe complications after delivery among women who delivered by cesarean, whether surgery was performed before or during labour, especially for women aged 35 and older. Although severe maternal complications are uncommon overall, the study found that, for women under 35, the odds of having severe complications for women who had a caesarean delivery were about 1.5 times those of women who had a vaginal delivery, while for women older than 35 the odds were almost twice as high. Most severe maternal complications involved

hemorrhage after delivery; the ability of the uterus to contract reduces with advanced maternal age.

“Our results raise questions about the practices of some obstetricians who perform cesarean deliveries because of advanced maternal age, perhaps with the idea that there will probably be no future pregnancies,” says Dr. Korb. “This practice should be modified to avoid unnecessarily exposing women older than 35 to the risk of severe acute maternal morbidity.”

“Risk of severe maternal morbidity associated with cesarean delivery and the role of maternal age: a population-based propensity score analysis” is published April 1, 2019.

MEDIA NOTE: Please use the following public links after the embargo lift:

Research: <http://www.cmaj.ca/lookup/doi/10.1503/cmaj.181067>

Contact for interviews: Dr. Catherine Deneux-Tharoux, INSERM, catherine.deneux-tharoux@inserm.fr

General media contact: Kim Barnhardt, Communications, CMAJ, kim.barnhardt@cmaj.ca, [@CMAJ](#)

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kim.barnhardt@cmaj.ca