

Weigh risks to mother, infant when planning C-sections, researchers say

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Some planned caesarean section births in Canada show a three-fold higher risk of severe complications compared with vaginal delivery, researchers have found.

Epidemiologist Shiliang Liu of the Public Health Agency of Canada in Ottawa and colleagues looked at the rate of severe complications in 46,766 healthy women who had a non-urgent caesarean delivery for a breech baby, compared with 2,292,420 healthy women who delivered non-breech babies vaginally.

The rate of complications such as major infection and blood clot in the planned C-section group was 27.3 per 1,000 deliveries, compared with 9.0 per 1,000 deliveries in the vaginal delivery group, the team reports in Tuesday's issue of the Canadian Medical Association Journal.

Doctors consider breech presentations to be riskier for the infant but not the mother, so that reason for choosing an elective C-section wasn't expected to cloud the relationship to complications, the researchers said.

While breech position is an accepted medical reason for planned C-sections, the researchers expressed concern about the growing number of women who choose to skip the pain of childbirth by planning C-sections.

Higher risks from C-sections

If C-sections were done for medical reasons, it's estimated they would comprise 15 per cent of live births in Canada. In 2003, the rate was higher than 25 per cent and it is rising.

"Our results suggested that severe maternal morbidity associated with either form of delivery is relatively rare. Nevertheless, compared with planned vaginal delivery at term, elective low-risk caesarean delivery poses higher risks of severe maternal morbidity," the team concluded.

The study's authors suggest that pregnant women and physicians should be aware of the potential risks and benefits to both the mother and infant when considering an elective C-sections.

Questions remain

In a commentary accompanying the study, Dr. Anthony Armson of Women's College Research Institute in Toronto, suggested several reasons for the trend toward planned caesareans, such as:

- Evidence suggesting that planned C-sections may reduce the risk of pelvic disorders in the mother, decreased risk of unexplained stillbirth and problems for the newborn such as cord prolapse.
- Avoidance of the anxiety and pain of labour.
- Reduced parental concern about the baby's health.
- Convenience of a scheduled birth.

The latest study adds to the growing body of evidence suggesting elective C-sections may place both the mother and newborn at higher risk of side-effects than planned vaginal births, Armson said.

"Given the current uncertainty about the optimal mode of delivery, women who elect to have a planned caesarean birth without any medical indication accept the possibility of adverse consequences for themselves and their babies in order to avoid the uncertainty and potential complications of planned vaginal birth," Armson wrote.

"Fortunately, maternal and perinatal mortality and severe morbidity associated with childbirth in Canada are uncommon."

Data for women in the study came from all provinces except Quebec and Manitoba. The births took place from April 1991 to March 2005.

Other factors such as maternal obesity may have contributed to the complication link, but the researchers did not have access to height or weight data to test the idea.

A large study in which women are randomly assigned to vaginal or C-section delivery would be the best way to answer which method is safer for both mothers and infants, but designing such a study would raise ethical concerns.