Should patients be entitled to cesarean section on demand?

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NO

For some time now, there has been a lot of debate around the constant increase in the rate of cesarean sections in industrialized counties. Canada is no exception to this trend, with a rate that increased from 17.6% in 1993 to 26.3% in 2008. More than 1 in 4 children are now born by cesarean in Canada. Paradoxically, during this same period, both physicians and members of the public have said that this rate is too high and they want it to decrease. The Society of Obstetricians and Gynaecologists of Canada continues to promote natural childbirth and has even developed strategies to optimize obstetric practices and make them safer for Canadian women (ALARM, MORE). In light of this, how have we reached a point where we simply accept cesarean sections on demand?

Maternal morbidity

Liu et al[1] compared delivery by elective cesarean with planned vaginal delivery. I say "planned" because they included in the vaginal delivery group the risks related to emergency cesareans performed during labour on women who had wanted vaginal delivery. The study demonstrated an increase in the risk of severe maternal morbidity with elective cesarean section: postpartum hemorrhage requiring a hysterectomy, cardiac arrest, wound site hematoma, venous thromboembolism, and major infections were all higher in the elective cesarean group.[1,2] While this increase in risk is low, with more than 3 million study patients, the study carries enough weight that such conclusions can be drawn. I find it interesting that this study is Canadian.

Complications for subsequent pregnancies, mostly risks relating to placentation, must not be overlooked. The incidence of placenta previa and placenta accreta increase, with direct consequences for the risk of hysterectomy. Multiple surgeries result in adhesions, increasing the risk of laceration of the bladder and intestine.

Some will say that cesareans on demand should be limited to women who do not want large families. As if one could be absolutely sure of such a decision! Tell me, how many men who have had a vasectomy want a reversal? Even after deciding, once and for all, that they didn't want any more children.

Cet article se trouve aussi en français à la **page 1251**.

Neonatal morbidity

The debate over neonatal morbidity has been put to bed. Several studies have demonstrated that babies born by cesarean are more likely to experience respiratory issues, both transitory tachypnea and respiratory distress syndrome.[3,4] Of course, critics will say that respiratory distress associated with prematurity is, for all practical purposes, eliminated when a cesarean is performed after 39 weeks of gestation, a date that must be documented by ultrasonogram before the 20th week.[3,4] Yet transitory tachypnea in newborns is more common. If you don't think that this is serious, just ask a mother who has had her baby taken away from her and placed in a neonatal unit or whisked away by air ambulance owing to a lack of quality obstetric neonatal care resources, and who is now unable to breastfeed her baby. Not to mention all of the risks associated with "overzealous" iatrogenic treatments ranging from intravenous therapy and intubation (pneumothorax) to empiric antibiotic therapy and admission to neonatal intensive care.

Neonatal mortality

What should we take away from a recent study that documents over 8 million births and demonstrates a 69% increase in neonatal mortality in babies born by elective cesarean without active labour versus planned vaginal birth amongst women deemed to be at low risk?[5] We could criticize this study for not providing us with the causes of the neonatal deaths or for its lack of information on the indications for cesareans, but, even so, there is enough there to make us think. Unless other data are able to invalidate this study, it seems clear to me that, at present, in order to have counseled a patient appropriately, we must communicate this information to any woman who asks for a cesarean without a medical indication for one.

Psychological and social effects

I had a lot of trouble finding conclusive evidence in the literature regarding the long-term effects of cesareans on newborns and the mothers of newborns born by cesarean. But there are questions we must ask. Babies born by cesarean do not have the same benefit of contact with their mothers as their vaginally born counterparts. The contact is different, the feeling is different, contact with the breast is delayed, light is more intrusive, the ambient temperature is different. In short, it is not the same. To think that all of these differences

continued on ***page 1248***

YES *continued from* **page 1246**

the pregnancy, delivery, and postpartum period unfold safely for the family and care staff.

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Competing interests
None declared

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References

1. American College of Obstetricians and Gynecologists. ACOG Committee opinion no. 394, December 2007. Cesarean delivery on maternal request. *Obst Gynecol* 2007;110(6):1501-4.
2. Agency for Healthcare Research and Quality. *Cesarean delivery on maternal request.* Evidence Report/Technology Assessment no.133. Rockville, MD: Agency for Healthcare Research and Quality; 2006.
3. Hannah ME, Hannah WJ, Hewson SA, Hodnett ED, Saigal S, Willan AR. Planned cesarean section versus planned vaginal birth for breech presentation at term; a randomised multicentre trial. Term Breech Trial Collaboration Group. *Lancet* 2000;356(9239):1375-83.
4. Hannah ME, Hannah WJ, Hodnett ED, Chalmers B, Kung R, Willan A, et al. Outcomes at 3 months after planned cesarean vs planned vaginal delivery for breech presentation at term: the international randomized Term Breech Trial. *JAMA* 2002;287(14):1822-31.
5. Fischer J, Astbury J, Smith A. Adverse psychological impact of operative obstetric interventions: a prospective longitudinal study. *Aust N Z J Psychiatry* 1997;31(5):728-38.
6. Bost BW. Cesarean delivery on demand: what will it cost? *Am J Obstet Gynecol* 2003;188(6):1418-23.
7. Towner D, Castro MA, Eby-Wilkens E, Gilbert WM. Effect of mode of delivery in nulliparous women on neonatal intracranial injury. *N Engl J Med* 1999;341(23):1709-14.

CLOSING ARGUMENTS

- The principle of a patient's right to actively participate in his or her choice of medical treatments should be extended to cesarean section on demand.
- Maternal morbidity with planned cesarean is the same as with planned vaginal delivery.
- The costs of a cesarean section on demand are the same as those incurred for a vaginal delivery with oxytocin.

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NO *continued from* **page 1247**

do not affect newborns is wishful thinking. Simply put, there must be an effect. How strongly and for how long, we don't know. It is high time that someone determined these effects before our rate exceeds 50%.

Conclusion

Cesarean section on demand is a new obstacle to the demedicalization of childbirth and will certainly result in an even greater increase in the rate of cesareans in the future. It carries risks for both mother and baby, not to mention increased health care costs and longer hospital stays.[6] Clinicians should instead learn what is behind patients' requests and offer solutions, instead of simply acquiescing.

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Competing interests
None declared

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References

1. Liu S, Liston RM, Joseph KS, Heaman M, Sauve R, Kramer MS, et al. Maternal mortality and severe morbidity associated with low-risk planned cesarean delivery versus planned vaginal delivery at term. *CMAJ* 2007;176(4):55-60.
2. Liu S, Heaman M, Joseph KS, Liston RM, Huang L, Sauve R, et al. Risk of maternal postpartum readmission associated with mode of delivery. *Obstet Gynecol* 2005;105(4):836-42.
3. American College of Obstetricians and Gynecologists. ACOG Committee opinion no. 394, December 2007. Cesarean delivery on maternal request. *Obst Gynecol* 2007;110(6):1501-4.
4. Zanardo V, Simbi AK, Franzoi M, Soldà G, Salvadori A, Trevisanuto D. Neonatal respiratory morbidity risk and mode of delivery at term: influence of timing of elective cesarean delivery. *Acta Paediatr* 2004;93(5):643-7.
5. MacDorman MF, Declercq E, Menacker F, Malloy MH. Neonatal mortality for primary cesarean and vaginal births to low-risk women: application of an "intention-to-treat model." *Birth* 2008;35(1):3-8.
6. Bost BW. Cesarean delivery on demand: what will it cost? *Am J Obstet Gynecol* 2003;188(6):1418-23.

CLOSING ARGUMENTS

- Liu et al have demonstrated an increased risk of maternal morbidity with elective cesareans. Several studies show that cesarean delivery increases neonatal morbidity.
- Cesarean section on demand is an obstacle to the demedicalization of childbirth.
- We need to ask questions and offer solutions instead of simply acquiescing to patient requests for cesarean section.

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