CEOG Clinical and Experimental Obstetrics & Gynecology

Original Articles

Flemish obstetricians' personal preference regarding induction of labor and mode of delivery in term births

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Summary

Introduction: In a 2002 survey, 2% of Flemish gynecologists preferred elective cesarean section for themselves or their partner. This study aims to determine actual preference regarding induction of labor and mode of delivery in term cephalic or breech births for gynecologists or their partners. *Materials and Methods:* An anonymous postal questionnaire was sent to all gynecologists and trainees in Flanders. *Results:* Response rate was 28.2 % (241/852). In case of an uncomplicated cephalic singleton pregnancy, 39 gynecologists (16.2%) preferred cesarean section. Most (n=134, 66.5%) chose induction at 41 weeks, 26 (13%) at 40 weeks, 37 (18%) at 42 weeks, 26 (13%) at 40 weeks, three (1.5%) preferred induction before 40 weeks and two (1%) would wait until after 42 weeks. Concerning term breech, 30% (n=72) opted for vaginal delivery and 70% (n = 169) for planned cesarean section. Ninety-nine (41%) gynecologists preferred to attempt external version first. Only 115 (47.7 %) gynecologists felt professionally capable to assist vaginal breech delivery themselves; about one-third (n=96; 38%) had performed less than ten vaginal breech deliveries in their career. *Conclusions:* Flemish gynecologists are still in favor of vaginal delivery for themselves in terms of cephalic position, but an increasing number favor planned cesarean section. Most Flemish gynecologists opt for cesarean section for themselves or their partners in case of term breech and state that they do not feel capable in assisting vaginal breech delivery for their patients.

Key words: Cesarean; Induction of labor; Breech; Gynecologist; Obstetrics.

Introduction

In obstetrics the discussion whether we should allow women to choose for cesarean section on demand without any obstetric indication remains a current debate [1]. One of the comments that is regularly mentioned in ethical discussions on this subject is the need for the mother to understand the risks from caesarean section in current and future pregnancies [2]. There is one specific group of pregnant women that is very well informed, namely obstetricians themselves. A very high variation has been reported in obstetricians' personal preference regarding mode of delivery. From 2% to 60% of obstetricians prefer elective cesarean delivery for themselves or their partners [3, 4]. In a previous study, performed one decade ago, gynecologists in Flanders demonstrated a very low percentage of personal preference for cesarean section [3] and were very reluctant to perform cesarean section on patient demand. The aim of the current study was to describe Flemish gynecologists personal preference regarding induction of labor for themselves or their pregnant partners and to determine which mode of delivery Flemish obstetricians/gynecologists prefer in case of a term cephalic or breech position for their partners or themselves.

Materials and Methods

A structured anonymous postal questionnaire was used. In January 2014 the questionnaire was sent to all 825 registered gynecologists in the region of Flanders, Belgium. Table 1 presents an overview of the questionnaire content. Results were calculated as absolute numbers and percentages. When appropriate, groups were compared using Chi-squared test with significance accepted at $p < 0.05$, odds ratios, and 95% confidence interval.

Results

In total, 241 out of 852 registered gynecologists replied, resulting in response rate of 28.3% of practicing obstetricians. Of the respondents, 125 were female (52%), 95 (39%) male, 21 (9%) did not answer this question. The male to female ratio is comparable to that of the complete group of registered trainees and gynecologists in Flanders (40% male, 60% females). There were 197 (82%) registered specialist gynecologists and 44 (18%) trainees. Most respondents had children (n= 187, 77.6%). For those that already had lived a delivery, there were 110 (out of 187, 58.8%) with spontaneous vaginal delivery; three had an instrumental vaginal delivery (1.6%), five (2.7%) underwent planned cesarean section, and eight (4.3%) had secondary cesarean section. Labor was induced in 59 (31.6%). There were 13 (6.9%) inductions before 39 completed weeks of gestational age, 18 (9.6%) inductions were at 39 weeks, 17 (9.2%) at 40

Revised manuscript accepted for publication November 3, 2015

Table 1. — *Content of the questionnaire.*

Questions	*Answers*
Sex	Male / female
Function	Trainee / specialist
Do you actually practice obstetrics	Yes / no
Have you our your partner given birth	Yes / no
Details per delivery	Vaginal / cesarean In case of cesarean: planned (elective) / secondary Weeks of gestation Induction / spontaneous labor
At what gestational age would you for yourself/partner, in case of an uncomplicated pregnancy and a baby presenting in a cephalic position, choose induction of labor?	39 weeks 40 weeks 41 weeks 42 weeks After 42 weeks
Would you prefer for yourself or your partner an elective cesarean section in case of an uncomplicated singleton pregnancy in cephalic position	Yes / no
What would you prefer for yourself or your pregnant partner in case of a term breech ?	Vaginal delivery without trial of external version Cesarean section without trial of external version First try external version - in case version fails then - cesarean / vaginal
In case of an uncomplicated term breech, what do you advise your patients?	Vaginal / cesarean
Do you feel experienced enough to perform vaginal breech delivery yourself?	Yes / no
How many vaginal breech deliveries did you assist personally in your career?	< 10 10−20 21−30 31−40 > 50

weeks, and 13 (6.9%) at 41 to 42 completed weeks of gestational age.

In case of a (hypothetic) non-complicated singleton pregnancy with cephalic presentation, 39 gynecologists (16.2%) preferred cesarean section for themselves or their partner. The majority of gynecologists who opted for vaginal delivery (n= 202) preferred induction of labor for themselves or their partner at 41 weeks (n=134, 68.5%); 26 preferred to have induction at 40 weeks (13.1 %) and 37 (18%) wanted to wait until 42 weeks. Only three (1.5%) chose to have labor induced before 40 weeks and two (1 %) wanted to wait until after 42 weeks. Concerning term vaginal delivery, 17% (n=41) preferred vaginal breech delivery without external cephalic version, 70 (29%) opted for a planned cesarean section without trial of external cephalic version, 54% (n=130) wanted to try external cephalic version first; of these 31 (24% of 130) would proceed with vaginal delivery in case version failed, and 99 (76% of 130) opted for cesarean section after failed external version. This signified that in total, 72 (n= 41, 30%) of gynecologists preferred vaginal breech delivery for themselves or their partners and 169 (n=70, 70%) opted for cesarean section. The majority of Flemish gynecologists (n=126, 52%), advised in favor of vaginal term breech delivery to their patients, but only 115 (47.7%) feels capable to assist vaginal breech delivery themselves. More than one-third (n=96, 38%) stated that they have performed less than ten vaginal breach deliveries in their entire career and 61 (25.3%) had performed more than 50 vaginal breech deliveries.

Comparing these data to an earlier survey reporting on data from 2002 [3], a significant rise can be noted in the percentage of gynaecologists opting for planned cesarean section for uncomplicated cephalic term singleton for themselves or their partner: from 2% (six out of 295) in 2002 to 16% (39 out of 241) in 2014 ($p < 0.0001$; OR 5.33, 95% CI 3.91-7.26).

Discussion

The present authors acknowledge that a weakness of this study was the rather low response rate, but as the ratio of female to male and the ratio of registered specialists to trainees is comparable to the general population, they believe these results are still representative of the Flemish situation. They do not know the proportion of gynecologists active in obstetrics in the complete register of gynecologists. Probably the large majority is practicing obstetrics, as in Flanders, the large majority of uncomplicated pregnancies are under specialist supervision and over 90 % of deliveries are in the presence of a gynecologist.

In 2003 in case of an uncomplicated singleton first pregnancy with a cephalic presentation, only 2% of Flemish gynecologists and obstetricians preferred elective cesarean section. In 2014 this has risen to 16%. Clearly there has been an evolution in the last decade with a larger group preferring cesarean section for themselves. The present study does not allow to provide background reasons on why this shift is taking place and can only hypothesize on this.

It is not known whether frequent contact with obstetric complications when working as a gynecologist influences the frequency for demand for a planned cesarean section, but it is known that how the preceeding delivery has been experienced does influence this choice, and it can be hypothesized that most obstetricians by the nature of their job, have some negative experience (be it not their own delivery) with vaginal birth [5]. Can it be that the increasing awareness of patient safety issues creates a feeling of unsafety when doctors become patients? It would be interesting to compare for instance the preferences of midwives versus those of gynecologists; to the present authors' knowledge, no such study has been published.

A higher preference for cesarean delivery in healthcare providers as compared to the general population has been noted repeatedly, up to 62% of Turkish healthcare providers

choses cesarean section [6], and two out of three of Turkish obstetricians prefer cesarean section as mode of delivery for themselves or their partners [4]; the same has been noted in China [7].

In a 2004 study in Denmark, only 1.1% of obstetricians would prefer an elective cesarean section in an uncomplicated pregnancy. This is comparable to the 2% in Flanders at that moment [8]. On the other hand, in a 2001 study, 7% of Irish obstetricians would choose elective cesarean section for themselves or their partners [9] and 15% of UK obstetricians in the same period [10].

When looking at the actual mode of delivery for those who have given birth, quite a different image is seen; for the past ten years the cesarean section rate for term singletons in Flanders has been round 15% (and slowly rising), and the total cesarean section rate for all deliveries in Flanders recently reached 20% [11]. In the present group, only 7% had a cesarean section, which is clearly less than the general population. In the general population, 10% of deliveries are instrumental vaginal deliveries, whereas in this group of gynecologists and their partners, only 1.6% had an instrumental vaginal delivery. The rate of induction of labor in Flanders approaches 30%, not different from the present study group.

It is notable that only about half of obstetricians would advise a vaginal delivery in case of a term breech, and it is regrettable that less than half of gynecologists at this moment in Flanders feels personally able to assist vaginal breech delivery, as about 30% has performed less than ten vaginal breech deliveries in their career and it is of no surprise that they feel unsafe. This number can be somewhat lower because this study included trainees. Actually assisting vaginal breech delivery is no longer part of the obligatory obstetrical curriculum for trainees to register for specialization. In reality in Flanders in 2013, 93% breech babies were born by cesarean section [11].

In conclusion the present study demonstrates that the attitude of Flemish gynecologists is still in favor of a vaginal delivery for themselves, their partner, and their patients. However, opinions are clearly changing and significantly more gynecologists now prefer to undergo cesarean section for themselves or their partners, as compared to ten years ago. Most gynecologists do not offer the possibility for vaginal breech delivery and do not consider themselves professionally capable of assisting such a delivery.

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