European Journal of Obstetrics & Gynecology and Reproductive Biology xxx (2018) xxx–xxx

Contents lists available at ScienceDirect

European Journal of Obstetrics & Gynecology and Reproductive Biology

journal homepage: www.elsevier.com/locate/ejogrb

Correspondence

Training and practical issues of breech and twin deliveries in the Netherlands

Dear Editor,

The percentage of vaginal deliveries (VD) for breech babies dropped dramatically in the Netherlands after the publication of the 'Term Breech Trial' (TBT) [1,2]. Nevertheless, the percentage VD for breech babies in The Netherlands is still among the highest in Europe [3]. Also, a relative large proportion of Dutch women pregnant with twins, deliver vaginally in The Netherlands [3].

After the publication of the TBT [2] and the 'Twin Birth Study' (TBS) [4], the question rose whether all gynecologists are still experienced and trained enough to assist in vaginal breech and twin deliveries. Also, in the abovementioned studies, the possibility to carry out an emergency CD within 30 min was a requirement for a planned vaginal delivery [2,4].

We aimed to assess 1) whether all gynecologists in each hospital with a delivery ward conduct vaginal breech or twin deliveries 2) how training for gynecologists in the hospitals is organized, and 3) how in various Dutch hospitals the availability of the OR team during the second stage of labor is arranged for these deliveries.

From December 2016 to March 2017 a survey was conducted in all Dutch hospitals with a delivery ward. One representative of each hospital was asked to fill out a questionnaire, which consisted of 15 multiple-choice questions. Questions focused on local

Table 1
Overview of answers of the respondents.

Responding hospitals (% of all responding hospitals)	74 (100)	
Minimum – maximum annual amount of deliveries per hospital (median)	500–3229 (1300)	
	Breech	Twins
Do all gynecologists in your hospital supervise singleton vaginal breech/twin deliveries?		
N (% of all respondents)		
Yes	55 (74)	68 (92)
The majority does, some do not	6 (8)	3 (4)
About half does	3 (4)	2 (3)
The majority does not, there are some 'Breech resp. Twin gynecologists'	2 (3)	0 (0)
Other	7 (9)	1 (1)
Do gynecologists receive training in performing singleton breech and twin deliveries?		
N (% of all respondents)		
Training for gynecologists [a]	49 (66)	29 (39)
No training for gynecologists	25 (34)	44 (59)
Who are these trainings meant for?		
N (% of all respondents) [b]		
Residents	10 (14)	5 (7)
Nurses	12 (16)	8 (11)
Midwives	15 (20)	10 (14)
Gynecologists	13 (18)	9 (12)
The whole team	47 (64)	26 (35)
How often does a gynecologist train?		
N (% of all respondents)		
Less than once a year	10 (14)	8 (11)
Once a year	20 (27)	13 (18)
Once every six months	15 (20)	6 (8)
Once every quarter or more frequently	4 (5)	2 (3)
This depends on the area of interest	1 (1)	1 (1)
How does the training look like?		
N (% of all respondents) [b]		
In small groups, using the phantom	24 (32)	15 (20)
With the delivery team as a 'MOET-scenario'	43 (58)	26 (35)
Different	4 (5)	1 (1)
Presence of operation team during pushing phase of singleton breech/twin babies		
N (% of all respondents)		
OR team is always present (24/7)	18 (24)	18 (24)
OR team is called stand-by	27 (36)	37 (50)
Other: not always or on indication determined by attending gynecologist	29 (39)	19 (26)

[a] One respondent indicated gynecologists received training for singleton breech deliveries, but did not add gynecologist to the participants of the training.
[b] More than one answer allowed.

https://doi.org/10.1016/j.ejogrb.2018.03.037

agreements about supervision of these deliveries, the presence of the OR team, and training for twin and breech deliveries.

We obtained results from 74 (94%) of all 79 hospitals with a delivery ward, of which six (8%) university hospitals, 33 (45%) teaching hospitals and 35 (47%) non-teaching hospitals. The results are shown in Table 1.

All except one hospital offer vaginal deliveries to women with a singleton fetus in breech position. In the one exception hospital this is only offered to multiparous women. All hospitals offer vaginal deliveries to women pregnant with twins.

In 74% (N = 55) of the hospitals all gynecologists conduct breech deliveries, and in 92% (N = 68) all gynecologists conduct twin deliveries. When gynecologists decide not to perform vaginal breech deliveries, this decision is mainly based on their own feeling of ability to safely perform the delivery.

In 66% of the hospitals training is organized for breech deliveries (N = 44) and in 39% (N = 29) for twin deliveries. In 60% (N = 45) and 74% (N = 55) the operation team is always present during the vaginal delivery of a breech or twins, respectively.

It is remarkable that some gynecologists do conduct twin vaginal deliveries but not breech deliveries. The position of the second twin is not a stable position and is known to change in 10–20% of all cases after the delivery of the first child [5]. Thus, it seems logical to be prepared for a non-cephalic position of the second twin.

The Dutch guidelines do not describe the presence of an OR team as a necessary requirement for vaginal twin deliveries. An unplanned CD for both babies occurs in 14.8% after planned vaginal delivery in the Netherlands, and in about 5% of planned vaginal deliveries a cesarean of the second child after a vaginal delivery of the first, is needed [6]. Additionally, the anesthetist/OR team may be needed to assist when the need to perform a (podalic version and) breech extraction arises.

In conclusion, we have shown that in the majority of Dutch hospitals with a delivery ward all gynecologists conduct both vaginal breech and twin deliveries. Remarkably, some gynecologists do conduct twin vaginal deliveries but not breech deliveries.

Future research should focus on optimizing training efficiency and frequency, and on identification of factors that determine the feeling of experience and confidence with these deliveries.

Sources of funding

None.

Acknowledgement

None.

References

[1] Rietberg C.C.T., Elferink-Stinkens PM, Visser GHA. The effect of the Term Breech Trial on medical intervention behaviour and neonatal outcome in The Netherlands: an analysis of 35,453 term breech infants. BJOG 2005;112:205–9, doi:http://dx.doi.org/10.1111/j.1471-0528.2004.00317.x.

[2] Hannah ME, Hannah WJ, Hewson SA, Hodnett ED, Saigal S, Willan AR. Planned caesarean section versus planned vaginal birth for breech presentation at term: a randomised multicentre trial. Lancet 2000;356:1375–83, doi:http://dx.doi.org/10.1016/S0140-6736(00)02840-3.

[3] Macfarlane AJ, Blondel B, Mohangoo AD, Cuttini M, Nijhuis J, Novak Z, et al. Wide differences in mode of delivery within Europe: risk-stratified analyses of aggregated routine data from the Euro-Peristat study. BJOG 2015;123:559–68, doi:http://dx.doi.org/10.1111/1471-0528.13284.

[4] Barrett JFR, Hannah ME, Hutton EK, Willan AR, Allen AC, Armson BA, et al. A randomized trial of planned cesarean or vaginal delivery for twin pregnancy. N Engl J Med 2013;369:1295–305, doi:http://dx.doi.org/10.1056/NEJMoa1214939.

[5] Christopher D, Robinson BK, Peaceman AM. An evidence-based approach to determining route of delivery for twin gestations. Rev Obstet Gynecol 2011;4:109–16, doi:http://dx.doi.org/10.3909/riog0168.

[6] Goossens SMTA, Ensing S, van der Hoeven MAHBM, Roumen FJME, Nijhuis JG, Mol BW. Comparison of planned caesarean delivery and planned vaginal delivery in women with a twin pregnancy: a nation wide cohort study. Eur J Obstet Gynecol Reprod Biol 2018;221:97–104, doi:http://dx.doi.org/10.1016/j.ejogrb.2017.12.018.

Simone M.T.A. Goossens*
Department of Obstetrics and Gynecology, Máxima Medical Centre Veldhoven, PO Box 7777, 5500 MB Veldhoven, The Netherlands

Beau R.G.M. Speck
Department of Gynecology and Obstetrics, Máxima Medical Centre, Veldhoven, The Netherlands and Medical student at Maastricht University, The Netherlands

Lauren M. Bullens[a,b]
[a]*Department of Gynecology and Obstetrics, Máxima Medical Centre, Veldhoven, The Netherlands*

[b]*Department of Electrical Engineering, Eindhoven University of Technology, The Netherlands*

Sophie E.M. Truijens
Department of Gynecology and Obstetrics, Máxima Medical Centre, Veldhoven, The Netherlands

Guid S.G. Oei[a,b]
[a]*Department of Gynecology and Obstetrics, Máxima Medical Centre, Veldhoven, The Netherlands*

[b]*Department of Electrical Engineering, Eindhoven University of Technology, Eindhoven, The Netherlands*

* Corresponding author.
E-mail address: simone.goossens@mmc.nl (S. Goossens).

Received 14 March 2018

Available online xxx