

The 10-Group Classification System—a new way of thinking



Michael S. Robson, MBBS, MRCOG, FRCS, FRCPI

General message of the article

In this edition of the Journal, Hehir and colleagues have applied the 10-Group Classification System (TGCS)¹ to routinely collected US national birth data (2005 through 2014). The authors hypothesize that if hospital and health organizations used the TGCS it would allow standardized comparisons of cesarean delivery (CD) rates by identifying prospectively clinically distinct groups of women that are driving CD rates.^{2,3} It would also allow for a more targeted evaluation of quality and the processes associated with CD in these different groups.

Their main clinical finding from this large national database was similar to other studies.⁴ Women with a previous CD at ≥ 37 weeks with a single cephalic fetus (group 5) represent the largest single contributor to the overall CD rate. It is also the group whose contribution continues to increase. This is mainly due to an increase in the size of the group rather than an increase in the CD rate in the group.

The authors also question the possibility of misclassification of women because of the very high contribution of prelabor CD in women with a single cephalic presentation at ≥ 37 weeks' gestation but without a previous scar (groups 2b and 4b). Finally, they confirm that although groups 6–10 have high CD rates, because of their small size their contribution to the overall CD rate will always be minimal.

From these observations alone, the authors begin to ask themselves questions and quickly identify the need for more detailed but specific information to confirm or refute their hypotheses. The TGCS was on its own never intended to answer all questions. The processes that vary between labor and delivery units such as diagnosis of labor, rupture of membranes, diagnosis and treatment of dystocia, diagnosis of fetal distress, use of epidural analgesia, induction of labor, and many others are all important to understand when

interpreting the TGCS results in a particular data set. The authors comment that the TGCS does not include indications for CD and they are correct. An objective classification of indications for CD is also required within the TGCS and a classification that uses the same principles as the TGCS of grouping women using objective criteria has been implemented successfully.⁵

From this article it becomes clear that the TGCS represents a new way of thinking. It is not just a classification of CD or a useful way in focusing on how to reduce CD rates.⁶ It provides a common starting point⁷ for further analyses for all labor and delivery events and outcome and its principles of simplicity and clarity of thought help to stimulate interest, discussion, and education.

Importantly, it is presented in such a way that all clinicians, whatever their academic or professional background, can identify with it, encouraging long-term commitment and responsibility especially if shared nationally and internationally. A manual has been produced by the World Health Organization (WHO) to help implement and interpret the TGCS.⁸

The scientific merit of the article

The philosophy behind the TGCS and the methodology for implementing the TGCS has been well described elsewhere.^{8–10} However, there are a few suggestions that might enhance the message from this article.

It is important that the obstetric terminology used is standardized especially if the results are to be consistently interpreted. The term “nulliparous” rather than “primiparous” should be used as they strictly speaking refer to different groups of women.¹¹

It is crucial that the initial TGCS table is presented in a simple, standard, and consistent manner both in the literature and in slide presentations. The recommended table is presented in this editorial as a [Figure](#) and has been constructed from the 2014 data taken from Table 2 in the article. It differs from those tables in the article in 2 important aspects.

Firstly, and only for the initial overview of the results, groups 2a and 2b are amalgamated into 1 group as are 4a and 4b. At first sight this seems to be less informative but experienced users of the system will argue the opposite.

Secondly, the contribution to the overall CD rate by each of the groups in column 5 of the table is calculated in absolute percentages of the total population rather than the relative proportion of the number of CDs. This again will give the reader more instant information; otherwise significant trends could be missed. The detailed reasoning behind both of these suggestions is described elsewhere.⁸ The raw numbers of the total number of deliveries as well as CDs in the individual groups should always be available. The relative sizes of the

From the National Maternity Hospital, Dublin, Ireland.

Received May 14, 2018; revised May 22, 2018; accepted May 22, 2018.

The author reports no conflict of interest other than his name having been attached to the classification and that he was responsible for constructing it. There are no commercial benefits to the author. The author does receive invitations to scientific congresses to talk to clinicians about the use of the classification in clinical practice and organization of training courses.

Corresponding author: Michael S. Robson, MBBS, MRCOG, FRCS, FRCPI. mrobson@nmh.ie

0002-9378/free

© 2018 Elsevier Inc. All rights reserved.

<https://doi.org/10.1016/j.ajog.2018.05.026>

➤ [Related article, page 105.](#)

FIGURE
Cesarean sections using the 10-group classification system, 2014

Caesarean Sections - the 10 Groups 2014

	2014 US 1164954/3722031 31.3%	Size of group %	C/S rate in gp %	Contr of each gp 31.3 %
1 Nullip single ceph >=37 wks spon lab	78149/635436	17.1	12.3	2.1
2 Nullip single ceph >=37wks ind. or CS before lab	177749/398243	10.7	44.6	4.8
3 Multip (excl prev caesarean sections) single ceph >=37 wks spon lab	50615/1152360	31.0	4.4	1.4
4 Multip (excl prev caesarean sections) single ceph >=37wks ind. or CS before lab	238184/672271	18.1	35.4	6.4
5 Previous caesarean section single ceph >= 37 wks	401495/457254	12.3	87.8	10.8
6 All nulliparous breeches	13357/13813	0.4	96.7	0.4
7 All multiparous breeches (incl previous caesarean sections)	40906/44265	1.2	92.4	1.1
8 All multiple pregnancies (incl previous caesarean sections)	67707/98026	2.6	69.1	1.8
9 All abnormal lies (incl previous caesarean sections)	4500/6678	0.2	67.4	0.1
10 All single ceph <= 36 wks (incl previous caesarean sections)	92292/243685	6.6	37.9	2.5

Robson. *The 10-Group Classification System—a new way of thinking. Am J Obstet Gynecol* 2018.

groups should always be ascertained before the CD rates are analyzed.

Finally, this study refers to a large national database (National Vital Statistics System) and according to the results presented, each woman was able to be classified into one of the groups. This is an unusual finding in a large database and normally there is always a small percentage of women that are not classifiable due to a lack of information. It is always important to record the number and percentage of women that could not be classified as this is an important data quality indicator for the whole cohort and also a pointer to where data quality improvements could be made. If all the women were classifiable this would be worth commenting on in the text.

How this article compares to other similar information published

This article will hopefully be the first of many from the United States on the TGCS. The comparison with

similar information published elsewhere^{12,13} is important to both improve data quality and stimulate questions and discussion.

In comparing results, it is always important to think of the 3 reasons why there may be a difference in either the sizes of the groups or any of the events and outcomes within the groups. All labor and delivery events and outcomes can be classified in the TGCS.

Firstly, consider data quality. This may be data definition issues or data collection issues, both of which affect our ability to obtain good routinely collected data. Secondly, there may be significant differences in epidemiological variables. Lastly, if both of these have been accounted for then the only remaining reason is a difference in practice.

Table 2 from the Hehir et al article containing data from 2014 was reconstructed as previously described and the results interpreted in line with previously published data using the TGCS.

Download English Version:

<https://daneshyari.com/en/article/8752389>

Download Persian Version:

<https://daneshyari.com/article/8752389>

[Daneshyari.com](https://daneshyari.com)