

Contrary to the claim of Robledo et al,¹ results from such faulty RCT designs are not generalizable. They opined that the randomization in the Laparoscopic Approach to Cervical Cancer (LACC) trial ensured balance among measured and unmeasured confounders between the 2 comparison groups.² We disagree. First, it is difficult for any surgical RCT to provide any such balance because it is impossible to blind or mask a surgical procedure or perform a “sham” surgery; the unblinded nature of surgical RCTs inevitably leads to an unmeasured observer bias. Second, Robledo et al assume that the surgeons had similar expertise or similar variation in expertise in performing both procedures. This assumption is unreasonable for a new complex surgical procedure such as minimally invasive radical hysterectomy.

As we explained in our Viewpoint article,³ the LACC investigators had several choices to correct for differences in surgical skills; sadly, they did not follow any of the available choices so that the minimally invasive arm of the study was at a disadvantage. The RCT design could not have compensated for varied or suboptimal surgical skills and techniques in performing the minimally invasive procedure.

Robledo et al¹ characterized our suggestion of addressing surgical variability via individual center reporting, based on multilevel models, as “statistical acrobatics.” Our suggestion is a pragmatic one. In their letter, they admitted that the surgical volume was not distributed uniformly across the participating surgeons and therefore centers. In the LACC trial, cervical cancer recurrences occurred in only 14 of the 33 centers.² Should the remaining 19 centers, which had no recurrences, change their practice based on the results of the 14 centers when surgical proficiency has not been taken into serious consideration in the performance of the minimally invasive radical hysterectomy? ■

Farr R. Nezhat, MD

Director of Division and Fellowship
Minimally Invasive Gynecologic Surgery and Robotics
Department of Obstetrics and Gynecology
New York University (NYU) Winthrop University Hospital
NYU Long Island School of Medicine
Mineola, NY
fn0250@aol.com

Cande V. Ananth, PhD, MPH

Division of Epidemiology and Biostatistics
Department of Obstetrics, Gynecology, and Reproductive Sciences
Rutgers Robert Wood Johnson Medical School
New Brunswick, NJ

Anthony M. Vintzileos, MD

Department of Obstetrics and Gynecology
New York University (NYU) Winthrop University Hospital
NYU Long Island School of Medicine
Mineola, NY

The authors report no conflict of interest.

REFERENCES

1. Robledo KP, GebSKI V, Ramirez P. Generalizability from well-designed RCTs underpin their scientific strength. *Am J Obstet Gynecol* 2019;221:663.
2. Ramirez PT, Frumovitz M, Pareja R, et al. Minimally invasive versus abdominal radical hysterectomy for cervical cancer. *N Engl J Med* 2018;379:1895–904.
3. Nezhat FR, Ananth CV, Vintzileos AM. The two Achilles heels of surgical randomized controlled trials: differences in surgical skills and reporting of average performance. *Am J Obstet Gynecol* 2019;221:230–2.

© 2019 Elsevier Inc. All rights reserved. <https://doi.org/10.1016/j.ajog.2019.08.036>

Cerebroplacental ratio and estimated fetal weight, the 2 different yardsticks



TO THE EDITORS: We read with interest the work of Akolekar et al¹ and agree with the authors in that cerebroplacental ratio (CPR) as a stand alone measurement is unable to predict adverse perinatal outcome accurately, unless it incorporates extra information that is provided by estimated fetal weight (EFW), maternal characteristics, and future biochemical markers. In this regard, the accuracy of CPR has become a question of debate because the reported prediction ability for adverse perinatal outcome (APO) and intrapartum fetal compromise (IFC) by different groups presents notable variations. In our opinion, several aspects regarding the accuracy of CPR in the prediction of APO deserve to be commented.

Despite the reported low accuracy, CPR and middle cerebral artery Doppler, are the only ultrasonographic parameters that change before late-onset stillbirth² and placental abruption,³

which confirms that fetal cerebral vasodilation, and not weight restriction, represents the initial answer to the late unbalance between placental supply and fetal demands. A phenomenon that is related more with subacute cardiorespiratory decompensation than with chronic nutritional disorder that causes progressive weight loss.

In addition, when dealing with CPR prediction, we should consider that the existence of a low CPR only reflexes a reduction of the placental reserve, which is translated into a higher possibility of abnormal cardiotocography. This might explain the reason that CPR performs better at predicting cesarean delivery for fetal compromise and worse at predicting severe APO with encephalopathy and extremely low fetal acidosis, because they probably are related more with severe and unpredictable intrapartum events that cannot be anticipated by means of parturition hemodynamics.

Unfortunately, many of the APO and IFC will never be predicted.

Moreover, clinical studies and mathematical models have proved that fetal hemodynamics, which are represented by CPR, excels EFW in the association with surrogate markers of APO.^{4,5} However, many researchers still argue that CPR should be interrogated only in case of smallness for gestational age (SGA) and forget that EFW is in itself a less accurate parameter and that the finding of a higher CPR accuracy in SGA fetuses would also apply, probably in a more notable way, by permuting the order of examination. In fact, many clinicians indicate CPR is not accurate enough to screen for APO and IFC. Surprisingly, the same authors have no objection in using fetal biometry, a more imprecise test, which has also proved to yield high false positive and false negative rates.

Current clinical decisions are still influenced by a ponderal mentality, which prevents the full consideration of hemodynamics as an initial approach. However, if, as recently published, CPR excels all the proposed biometric approaches,⁵ we should ask ourselves whether the appropriate screening approach should be to perform hemodynamic evaluation in SGA or conversely to perform fetal biometry in cases of low CPR. Using the same yardstick, the answer is clear. ■

José Morales-Roselló, MD, PhD
Gabriela Loscalzo, MD
Silvia Buongiorno, MD

Alfredo Perales-Marín, MD, PhD
Servicio de Obstetricia
Hospital Universitario y Politécnico La Fe
Valencia, Spain
jose.morales@uv.es

The authors report no conflict of interest.

REFERENCES

1. Akolekar R, Ciobanu A, Zingler E, Syngelaki A, Nicolaides KH. Routine assessment of cerebroplacental ratio at 35-37 weeks' gestation in the prediction of adverse perinatal outcome. *Am J Obstet Gynecol* 2019;221:65.e1-18.
2. Morales-Roselló J, Galindo A, Herraiz I, et al. Is it possible to predict late antepartum stillbirth by means of cerebroplacental ratio and maternal characteristics? *J Matern Fetal Neonatal Med* 2019:1-7.
3. Morales-Roselló J, Khalil A, Akhoundova F, et al. Fetal cerebral and umbilical Doppler in pregnancies complicated by late-onset placental abruption. *J Matern Fetal Neonatal Med* 2017;30:1320-4.
4. Morales-Roselló J, Khalil A, Alberola-Rubio J, et al. Neonatal acid-base status in term fetuses: mathematical models investigating cerebroplacental ratio and birth weight. *Fetal Diagn Ther* 2015;38:55-60.
5. Morales-Roselló J, Cañada Martínez AJ, Scarinci E, Perales Marín A. Comparison of cerebroplacental ratio, Intergrowth-21st standards, customized growth, and local population references for the prediction of fetal compromise: which is the best approach? *Fetal Diagn Ther* 2019: 1-12.

© 2019 Elsevier Inc. All rights reserved. <https://doi.org/10.1016/j.ajog.2019.08.038>