

39-Week nulliparous inductions are not elective



Jeny Ghartey, DO, MS; George A. Macones, MD, MSCE

In August 2018, Grobman et al¹ published findings from the ARRIVE Trial: A Randomized Trial of Induction vs Expectant Management. More than 6000 women underwent random assignment at 41 academic and community hospitals that were participating in the Maternal-Fetal Medicine Units Network; 3062 women were assigned to labor induction, and 3044 women were assigned to expectant treatment. There was no difference in the primary outcome, which was a composite of adverse perinatal outcomes. Women who underwent labor induction were significantly less likely to deliver by cesarean (18.6% vs 22.2%; relative risk, 0.84; 95% confidence interval, 0.76–0.93) and were less likely to experience hypertensive disorders of pregnancy (9.1% vs 14.1%; relative risk, 0.64; 95% confidence interval, 0.56–0.74). Recently, a metaanalysis of 6 cohort studies had similar results.² Despite these compelling findings, labor induction in low-risk women has not become widely adopted and continues to remain controversial.^{3–5}

The Society for Maternal Fetal Medicine and the American College of Obstetrics and Gynecology issued similar statements on the findings of the ARRIVE trial.^{6,7} Both organizations advocate for a collaborative discussion and shared decision-making that includes the following talking points: (1) It is reasonable to offer elective induction of labor. (2) Women can be reassured that both elective induction of labor and expectant treatment are reasonable options at 39 weeks gestation, given no difference in composite perinatal outcome. (3) The decision is conditional on the values and preferences of the pregnant women, personnel, and setting in which labor induction is offered.

It is interesting, however, that both organizations use the term “elective” to describe these 39-week inductions (as did the ARRIVE trial itself).

The words we choose to describe medical interventions matter. They send a message to patients, physicians, nurses, and hospital administrators. When the term “elective” is applied to a medical intervention, it implies that it is not really necessary. That is certainly not the case when it comes to 39-week nulliparous induction. The

ARRIVE trial provides grade A (good and consistent) evidence that labor induction provided benefit with no harm to women and their infants. These inductions are not “elective.”⁸

In our own institution’s Quality Assessment Performance Improvement Committee (where we often discuss staffing and prioritization of cases), “medically-indicated” inductions are still prioritized over 39-week “elective” nulliparous inductions. Interestingly, the timing for “medically-indicated” births (such as, chronic hypertension, diabetes mellitus) is largely based on grade B (limited or inconsistent scientific evidence) or C (primarily consensus and expert opinion) evidence.⁹ It is fascinating that we continue to prioritize induction timing for conditions that are based on weaker evidence (medically-indicated) over induction timing that is founded on grade A evidence (39-week nulliparous induction). Use of the word “elective,” when it comes to 39-week nulliparous inductions, likely contributes to the inconsistencies in applying the level of evidence to these decisions.

We believe that the word “elective” should be removed completely in our discussions and professional documents about 39-week nulliparous inductions. We propose a more accurate term might be “risk-reducing,” which captures both the intent and proven benefit of 39-week inductions. The use of these words would allow for a more open and unbiased discussion with the patient and would provide important messaging to other physicians/nurses and leaders of our delivery units. Through shared decision-making, the findings of this study in the context of a large, randomized trial, with the understanding that this level of evidence does not exist for most obstetric conditions, must be emphasized so that women can make well-informed decisions about their pregnancy and delivery timing. ■

REFERENCES

- Grobman WA, Rice MM, Reddy UM, et al. Labor induction versus expectant management in low-risk nulliparous women. *N Engl J Med* 2018;379:513–23.
- Grobman WA, Caughey AB. Elective induction of labor at 39 weeks compared with expectant management: a meta-analysis of cohort studies. *Am J Obstet Gynecol* 2019;221:304–10.
- Phillippi JC, King TL. Assessing the value of the ARRIVE Trial for clinical practice: sea change or just a splash? *J Midwifery Womens Health* 2018;63:645–7.
- Carmichael SL, Snowden JM. The ARRIVE trial: interpretation from an epidemiologic perspective. *J Midwifery Womens Health* 2019;64:657–63.
- Ghi T, Dall’Asta A, Fieni S. Elective induction of labour in low risk nulliparous women at term: caution is needed. *Eur J Obstet Gynecol Reprod Biol* 2019;239:64–6.

From the Department of Women’s Health, Dell Medical School, University of Texas, Austin, TX.

Received Nov. 26, 2019; accepted Jan. 28, 2020.

The authors report no conflict of interest.

Corresponding author: George A. Macones, MD, MSCE. macones@austin.utexas.edu

0002-9378/free

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<https://doi.org/10.1016/j.ajog.2020.01.055>

6. Society of Maternal-Fetal (SMFM) Publications Committee. SMFM statement on elective induction of labor in low-risk nulliparous women at term: the ARRIVE Trial. *Am J Obstet Gynecol* 2019;221:B2-4.

7. Practice Advisory: Clinical guidance for integration of the findings of the ARRIVE Trial: Labor Induction versus Expectant Management in Low-Risk Nulliparous Women. Available at: [https://www.acog.org/](https://www.acog.org/Clinical-Guidance-and-Publications/Practice-Advisories/Practice-Advisory-Clinical-guidance-for-integration-of-the-findings-of-The-ARRIVE-Trial)

[Clinical-Guidance-and-Publications/Practice-Advisories/Practice-Advisory-Clinical-guidance-for-integration-of-the-findings-of-The-ARRIVE-Trial](https://www.acog.org/Clinical-Guidance-and-Publications/Practice-Advisories/Practice-Advisory-Clinical-guidance-for-integration-of-the-findings-of-The-ARRIVE-Trial). Accessed October 14, 2019.

8. Voutsos L. Prophylactic induction. *Am J Obstet Gynecol* 2020;222:290.

9. Spong CY, Mercer BM, D'alton M, Kilpatrick S, Blackwell S, Saade G. Timing of indicated late-preterm and early-term birth. *Obstet Gynecol* 2011;118:323-33.