



## Recommendations for perinatal care have a troubling pedigree

📌 “Common sense,” debatable evidence—is that what we want shaping the practice of obstetrics?

### CASE

#### No taxation with completed gestation

A 29-year-old, healthy woman, G2P1, with a prior cesarean delivery for failure to progress, requests a scheduled cesarean delivery—on December 30, when she will be at 37 weeks, 4 days. She chose the date to receive an exemption on her federal tax return for the newborn this year.

Should you perform elective delivery on that day?

Also, should you provide prophylaxis for deep venous thrombosis after her cesarean delivery?

We're at the beginning of a new era in obstetrics—when clinical guidelines developed by national committees that were not convened by the American College of Obstetricians and Gynecologists (ACOG) reinvent our practice. Here's one example: new **Consensus Standards for Perinatal Care**—18 recommendations promulgated by the National Quality Forum (NQF), a private, dues-based membership organization that convenes stakeholders in health care to coordinate efforts to achieve consensus on actions that can improve patient care.

Two of those NQF perinatal guidelines demand our particular attention:

- Do not schedule elective deliveries

before 39 weeks' gestation

- Provide appropriate prophylaxis for deep venous thrombosis (DVT) for women undergoing cesarean delivery.

Both recommendations could substantially alter the practice of obstetricians and the protocols of obstetric hospitals. **Neither is supported by randomized clinical trials focused on the target clinical population.** Both could be viewed as common-sense guidelines, so to speak, based on **1) expert opinion and 2) data gleaned from other clinical situations.**

True, DVT prophylaxis has been demonstrated in clinical trials to reduce postop risk of clinically significant thrombosis—for hip replacement surgery.<sup>1</sup> Applying common sense, it's conceivable that a similar benefit could be observed in a population of pregnant women. But no such benefit has been demonstrated.

And again: Based on epidemiologic data, it's been proposed that we might, slightly, reduce the risk of adverse neonatal outcomes by avoiding early-term delivery. From a similar common-sense point of view, then, why take the risk of an early-term birth?

#### NQF: No elective delivery until 39 weeks of gestation are past

No randomized clinical trials demonstrate that delivery between 37

and 39 weeks' gestation is associated with an increased risk of meaningful adverse neonatal outcomes, compared with delivery **between 39 and 41 weeks.** Epidemiologic studies do reveal that cesarean delivery **before 39 weeks** is associated with adverse outcomes, including respiratory distress and neonatal sepsis.

**Study ties complications to gestational age.** In a prospective study of 13,258 elective repeat cesarean deliveries in the United States, investigators did observe a relationship between an increasing rate of neonatal complications and decreasing gestational age.<sup>2</sup> In the study, 36% of the repeat cesarean deliveries were performed between 37 and 39 weeks' gestation; 49%, at 39 weeks; and 15%, after 40 weeks, with these outcomes:

- **Respiratory distress** was diagnosed in 3.7%, 1.9%, and 0.9% of newborns delivered, respectively, at 37, 38, and 39 weeks
- **Hypoglycemia** was treated in 2.4%, 0.9%, and 0.7% of newborns delivered at, respectively, 37, 38, and 39 weeks.

Similar results have been reported in retrospective studies of vaginal deliveries.<sup>3</sup>

Elective delivery at 37 and 38 weeks appears to be associated with an increase in neonatal complications, compared with delivery at 39 weeks. ACOG has addressed this problem with a recommendation

that **scheduled elective delivery in healthy women should not occur before 39 weeks' gestation, to increase the likelihood of fetal lung maturity.**<sup>4</sup>

Most OBs would agree, I believe, that scheduled elective delivery before 39 weeks isn't warranted for the average healthy woman. But specific, non-disease-related clinical situations *might* warrant delivery before 39 weeks—including maternal anxiety related to continuing pregnancy, distance from the hospital, and a history of fast labor. Such situations should, however, represent a minority of scheduled deliveries.

The proposed NQF guideline raises one other clinical issue: If you plan to deliver the hypothetical woman described at the beginning of this Editorial at 37 weeks and 4 days by elective repeat cesarean delivery, should you obtain evidence of fetal lung maturity by amniocentesis before performing the delivery?

## **NQF: Give DVT prophylaxis to women undergoing cesarean delivery**

DVT prophylaxis for women who are undergoing cesarean delivery has not been demonstrated definitively to reduce the risk of clinically significant thrombosis or pulmonary embolism—the issue has not been addressed by adequately powered randomized clinical trials. In the United States, DVT prophylaxis for cesarean delivery is not routine, and recommending it for all women undergoing cesarean delivery is, I believe, premature.

You should, however, consider DVT prophylaxis in select high-risk women—especially with a mechanical method that has a low risk of complications, such as venous compression stockings or pneumatic compression boots. Anticoagulation for prevention of DVT in low-risk

patients undergoing cesarean delivery is risky, because these drugs are associated with an elevated risk of perioperative bleeding.

One piece of evidence is missing, however, leaving an important question unanswered: In a low-risk population, is any form of DVT prophylaxis superior to standard post-surgical management that includes early ambulation? The “taxed” patient I described, who is at relatively low risk of clinically significant DVT, may warrant early ambulation and consideration of intermittent pneumatic compression or graded venous compression stockings.

By comparison to the NQF guideline, the American College of Chest Physicians (ACCP) recommends that you assess the risk of thrombosis in women undergoing cesarean delivery. ACCP does not recommend routine prophylaxis for women who are at low risk of DVT.<sup>5</sup>

ACOG has not offered an opinion on the routine use of DVT prophylaxis for low-risk women undergoing cesarean delivery.

## **What leads—good evidence, or common sense?**

In a time of evidence-based medicine, **promulgating clinical guidelines without relying on high-quality evidence is fraught with problems.** When evidence is insufficient, or of poor quality, it's best that guideline developers, including the NQF, do not resort to common-sense opinion to support their work.

Even when the evidence for a change in ObGyn practice is good, I believe that ACOG ought to lead in developing guidelines. The College is, after all, the national leader in advancing women's health, and it has highly effective processes for evalu-

# Instant Poll



This month, **OBG MANAGEMENT** puts two questions to you about the NQF perinatal guidelines:

**What's the earliest date at which you're willing to schedule elective repeat cesarean delivery?**

- 36 weeks
- 37 weeks
- 38 weeks
- 39 weeks
- 40 weeks

**When a healthy woman has a scheduled elective repeat cesarean delivery, what is your usual practice for preventing deep venous thrombosis? (Select one answer.)**

- I recommend early ambulation postoperatively
- I order compression stockings
- I order pneumatic compression boots
- I prescribe an anticoagulant
- I don't uniformly order DVT prophylaxis in this setting

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ating the relative benefits and risks of new clinical recommendations that will have an impact on the care that we provide. 📧



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[Editor's note: Learn more about the National Quality Forum perinatal care guidelines and other NQF projects at <http://www.qualityforum.org>.]

#### References

1. Bergqvist D, Benoni G, Björgell O, et al. Low-molecular weight heparin (enoxaparin) as prophylaxis against venous thromboembolism after total hip replacement. *N Engl J Med.* 1996;335:696-700.
2. Tita ATN, Landon MB, Spong CY, et al, for the Eunice Kennedy Shriver NICHD Maternal-Fetal Medicine Units Network. Timing of elective repeat cesarean delivery at term and neonatal outcomes. *N Engl J Med.* 2009;360:111-120.
3. Morrison JJ, Rennie JM, Milton PJ. Neonatal respiratory morbidity and mode of delivery at term: influ-

ence of timing of elective cesarean section. *Br J Obstet Gynaecol.* 1995;102:101-106.

4. American College of Obstetricians and Gynecologists. ACOG Practice Bulletin No. 97: Fetal lung maturity. *Obstet Gynecol.* 2008;112:717-726.
5. Bates SM, Greer IA, Pabinger I, Sofaer S, Hirsh J. Venous thromboembolism, thrombophilia, antithrombotic therapy, and pregnancy: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). *Chest.* 2008;133(6 Suppl):844S-886S.

#### WHAT IS THE OPTIMAL TIMING OF ELECTIVE CESAREAN DELIVERY AT TERM? 📧

Read exclusive commentary by Andrew M. Kaunitz, MD, on the results of Tita and colleagues' newly published study, in "Examining the Evidence" on page 20 of this issue.

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