

Risk of pressure ulcers in maternity units



TO THE EDITORS: We read with great interest the article by Thuillier et al.¹ Through a before-and-after cohort study, the authors have found a significant reduction in the risk of cesarean delivery in low-risk populations following application of new recommendations from the American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal Medicine, who jointly published an Obstetric Care Consensus for safe prevention of the primary cesarean delivery.² These results are encouraging and suggest a positive effect from these recent recommendations on labor management to reduce the risk of first cesarean delivery.

A randomized study being difficult to carry out, it is indeed necessary to publish such cohort studies.

We would like to point out to readers a probable oversight of these recommendations: the prevention of pressure ulcers in the delivery room. Indeed, as attested by this study by Thuillier et al., these new recommendations lead to a major increase in labor duration (median duration of labor before cesarean delivery: 540 minutes in the postguideline period, vs 420 minutes before).

Parturients accumulate numerous risk factors for pressure ulcers, sometimes passing in several hours from stage 1 (redness) to stage 3 or 4 (deep pressure ulcers): immobility and unsuitable positions (especially with epidural use), excessive humidity (particularly after rupture of membranes), excess weight, dehydration, prolonged labor, lack of risk assessment and planning, and lack of bariatric and pressure-relieving equipment.³

Following a case of pressure ulcers observed during long-term labor with epidural analgesia in our unit (university tertiary care center), we implemented a prevention strategy: detection of early signs and appropriate treatment by all nursing staff working in the maternity unit (obstetrician, midwives, caregivers). We have thus been able to highlight several early-stage pressure ulcers that were treated prior to onset of deeper pressure ulcers with a worse prognosis. We believe it is important to sensitize obstetric teams to this unknown risk and the need for regular mobilization of patients, particularly in cases of epidural analgesia or comorbidities (diabetes, obesity, edema, etc) and to provide correct hydration. It is necessary to recognize the early signs of pressure ulcers and to know how to treat them, involving patients in this care strategy. ■

Paul Guerby, MD
Obstetrics Department, Paule de Viguier Hospital, CHU Toulouse
Toulouse, France
INSERM UMR 1048, I2MC, Université de Toulouse
Toulouse, France
paul.guerby@gmail.com

Beatrice Guyard-Boileau, MD
Obstetrics Department, Paule de Viguier Hospital, CHU Toulouse
Toulouse, France

Olivier Parant, MD

Obstetrics department, Paule de Viguier Hospital, CHU Toulouse
Toulouse, 31059, France
Faculté de Médecine, Université Toulouse III
Toulouse, France

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REPLY



We would like to thank Dr Guerby and his colleagues for their interesting and relevant comments regarding our recent article. They usefully highlight the risk of occurrence of pressure ulcers during labor. The association of this risk with prolonged epidural analgesia is not new; a report as long ago as 1985¹ indicates that the recent increase of labor duration is not the major cause of intrapartum pressure damage. The combination of direct pressure with friction and shear forces may cause damage within 2–6 hours² and even a matter of a few minutes in some cases. The use of hard delivery beds, plastic draw sheets, and poor-quality incontinence pads further increases friction and shearing by adhesion to the skin and trapping of moisture.³

Nonetheless, as it is not expected that healthy young women in childbirth will develop pressure ulcers, specific preventive studies have excluded maternity wards. Reddy et al² published a systematic review examining the evidence in interventions to prevent pressure ulcers from 59 relevant randomized controlled trials (13,845 patients); not one of these trials dealt with pregnant women during labor. These complications have thus been understudied, and their incidence probably underestimated—points that contribute to the paucity of knowledge about preventing the occurrence of pressure ulcers during labor with epidural analgesia.

Therefore, we thank Dr Guerby and his colleagues for reminding us—and the midwives, obstetricians, and anesthesiologists reading this journal—to remain consistently aware of the importance of pressure area care in maternity

units. Mattresses for the labor ward must be of high quality and be audited regularly for signs of fatigue, soiling, and damage. Parturients need to be regularly turned side to side, and sheets changed as and when necessary. Finally, it is essential that all women in labor be assessed for risk of pressure damage. ■

Claire Thuillier, MD
Patrick Rozenberg, MD
Department of Obstetrics and Gynecology
Poissy-Saint Germain Hospital
Versailles-St Quentin University
Poissy, France

c Thuillier@chi-poissy-st-germain.fr

The authors reports no conflict of interest.

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Induction of labor at term



TO THE EDITORS: Souter et al¹ have presented a careful and comprehensive evaluation of outcomes after elective induction of labor compared with expectant management. These authors have joined the ranks of others who offer labor induction at 39 weeks gestation as a favorable alternative to expectant management. An explanation for the findings of these groups is that expectant management is associated with a higher prevalence of preeclampsia and with larger babies, which are findings that were confirmed in the ARRIVE trial.²

The studies in this area are limited by the expectant management group being managed by modern obstetricians, whose inclination for intervention may be higher than is optimal. Larger babies mean longer labors, which may tax the patience of the modern obstetricians, and preeclampsia is alarming to some practitioners who may not be willing to stabilize the patient and wait for the uterus to respond to oxytocin. As gestation advances, there may be less amniotic fluid with consequent benign variable decelerations that are over-interpreted as fetal hypoxemia.

The answer might come from a careful review of the cesarean deliveries in these studies to determine whether they represent a disadvantage of expectant management or a consequence of modern obstetrics training. Obstetricians of my vintage were trained when the cesarean delivery rate was considered high at 15% and when we didn't have so many categories of fetal tracings. Even in the modern era, the midwives at my institution have a cesarean delivery rate of 3–5%, caring for exactly the kind of patient in the ARRIVE trial. The current high induction and cesarean rates in modern obstetrics have not given us better babies, and we would do well to be concerned about effects on maternal morbidity and mortality rates. ■

Anthony R. Scialli, MD
Scialli Consulting LLC
Washington, DC
ascialli@scialliconsulting.com

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REPLY



We appreciate Dr Scialli's thoughtful comments about our study on elective induction of labor (IOL) at term and his concerns about current obstetric practices that contribute to high rates of intervention in births beyond 39 gestational weeks.¹

Term elective IOL is 1 of a growing number of optional interventions in maternity care. Unlike many obstetric practices, we have increasing evidence about the impact of induction of labor that we can share with individual patients and that may help inform their birth choices.² We believe this information is useful for clinicians and patients alike.

However, Dr Scialli raises a bigger question about whether recent study results reflect unnecessarily high rates of intervention in births at >39 weeks gestation and whether term elective IOL would still appear beneficial in a clinical context in which there was less intervention in labor at later gestational weeks. This is an important question; however, determining whether a cesarean delivery prevented an adverse outcome or was an unnecessary reaction to perceived risk is challenging.

Relationships between obstetrics interventions and outcomes are not straightforward. Over the last 40 years, induction has more than doubled while cesarean delivery rates