

## Risk of pressure ulcers in maternity units



**TO THE EDITORS:** We read with great interest the article by Thuillier et al.<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup>

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. ■

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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 1985<sup>1</sup> 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 hours<sup>2</sup> 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.<sup>3</sup>

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 al<sup>2</sup> 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