LETTERS TO THE EDITORS

Vaginal wall stretching

To the Editors: In the paper by Liebling et al1 on pelvic floor morbidity after instrumental delivery and cesarean delivery, no mention is made of the length of time the subjects were in the second stage. American physicians who performed abdominal delivery for prolonged obstructed labor in the 19th century often delivered the fetus by anterior vaginotomy (laparoelytrotomy, gastroelytrotoomy).2 The vaginal incision was possible because, during a prolonged second stage, the vagina becomes stretched over the fetal presenting part as the cervix continues to retract. In 1942, Danforth et al3 suggested that the tremendous vaginal distensibility and elongation that sometimes occurs during the second stage of labor was not appreciated by obstetricians. I know of no long-term follow-up studies on patients after cesarean delivery with vaginal stretching (observed at the time of surgery), but it seems reasonable to presume that this stretched vaginal wall remains elongated, creating future cystoceles. If cesarean delivery is to protect the pelvic floor, it probably should be performed before the second stage of labor.

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References


Reply

To the Editors: We welcomed the response to our paper by Robert Goodlin. He raised several important and interesting issues.

First, although we did not highlight the length of the second stage of labor, this was included in our data collection (Table I) and was used in our multivariable statistical analyses. The mean time for the second stage of labor in our cohort was 2 hours 26 minutes (median, 2 hours 30 minutes). We observed a range of between 0 and 11 hours, with > 50% of the cohort experiencing a second stage of between 2 and 4 hours. Previous studies have found an association between prolonged second stage of labor and neurophysiologic damage to the pelvic floor.1,2 However, we did not find an independent association between prolonged second stage of labor and increased risk of urinary or bowel symptoms when we controlled for the actual mode of delivery.

Second, we did not collect details of vaginal wall stretching that was observed at the time of cesarean delivery, although we recorded the extension of the uterine incision into the lower genital tract. Neither did we specify whether entry had taken place through the anterior vaginal wall. As suggested by Goodlin, unintended incision into the anterior vaginal wall may occur on occasion when a cesarean delivery is being performed at full dilation. This information may be important to those who study this interesting group of women in the future and should be borne in mind.

To comment on Goodlin’s final point, certainly the prevalence of urinary symptoms in our cesarean delivery group was higher than that reported by other studies that looked at urinary symptoms after elective cesarean delivery,3 which supports the theory that cesarean delivery late in labor does not protect the pelvic floor.