

Authors' reply re: Cesarean section in the second delivery to prevent anal incontinence after asymptomatic obstetrical anal sphincter injury: the EPIC multicenter randomized trial. (Response to BJOG-20-2022)

laurent abramowitz¹, Laurent Mandelbrot², Florence Tubach³, and Carine Roy³

¹APHP

²Hopital Louis-Mourier

³AP-HP

October 13, 2020

Letter to the Editor, BJOG Exchange

Authors' reply re: Cesarean section in the second delivery to prevent anal incontinence after asymptomatic obstetrical anal sphincter injury: the EPIC multicenter randomized trial

Dear editor,

We thank Sultan et al (1), whose pioneering work is a source of inspiration, for their interest in our EPIC study and their relevant questions (2). We started our project more than ten years ago with the hypothesis that cesarean section is protective in case of anal sphincter lesions to prevent anal incontinence, and like them we were quite surprised by the results showing that a cesarean section for the subsequent delivery failed to prevent anal incontinence 8 months after delivery. We agree of course that long term follow-up should be performed.

We agree that the difference between a scar and a sphincter defect is sometime difficult to distinguish. We also agree that the use of a validated ultrasound score may be useful but none was available when we designed our study 14 years ago. We did not plan an independent review of ultrasound interpretation because we previously showed 98.9% inter-observer concordance in our center in a previous study you mentioned (3). A large number of sub-group analyses was not planned in order to avoid inflation of type 1 error. We do however agree that the description of anal sphincter lesions must be detailed, which it is why we evaluated the levator muscle, internal and external sphincter (deep and superficial fibers) according to their angulation defect as well as their depth and length. Levator muscle and internal anal sphincter lesions were too rare to deserve statistical test. Nonetheless, our analysis did not show a benefit of cesarean section, even in case of severe anal sphincter lesions with more than 90° angulation, more than 50% height and 50% thickness (p=0.78).

The statement that 85% of forceps deliveries had an undiagnosed OASI is an overstatement. Anal sphincter lesions were diagnosed by ultrasound in 231 of 391 patients (59%) with a first delivery by forceps, of which 159 (69%) were undiagnosed at delivery. These findings are consistent with those we reported in 2000 (3).

We did not perform anorectal manometry according to practice guidelines (4), since it is not well correlated with sphincter defects and because manometric results are less relevant than anal symptoms. Treating a low level of pressure, particularly with surgery such as cesarean section would not be recommended, whereas treating a symptom would be justified.

The randomized controlled design avoided recruitment biases between the 2 groups, and failed to show that systematic cesarean section in case of asymptomatic sphincter lesions was protective from anal incontinence 8 month after the second delivery.

[Authors] Laurent Abramowitz, Laurent Mandelbrot, Florence Tubach, Carine Roy.

References:

1. Okeahialam NA et al. Re: Cesarean section in the second delivery to prevent anal incontinence after asymptomatic obstetrical anal sphincter injury: the EPIC multicenter randomized trial. (First comment letter. Reference to be added).
2. Abramowitz L, Mandelbrot L, Bourgeois Moine A, Le Tohic A, de Carne Carnavalet C, Poujade O, et al. Cesarean section in the second delivery to prevent anal incontinence after asymptomatic obstetrical anal sphincter injury: the EPIC multicenter randomized trial. *BJOG: Int J Obstet Gy.* 2020 Aug 8;1471-0528.16452.
3. Abramowitz L, Sobhani I, Ganansia R, Vuagnat A, Jean Louis Benifla JL, Darai E, et al. Are sphincter defects the cause of anal incontinence after delivery. Results of a prospective study. *Dis Colon and Rectum.* 2000;43:590-8.
4. Vitton V, Soudan D, Siproudhis L, Abramowitz L, Bouvier M, Faucheron JL, et al. Treatments of faecal incontinence: recommendations from the French National Society of Coloproctology. *Colorectal Dis.* 2014 Mar;16(3):159-66.