

Original Research

GYNECOLOGY

Longitudinal study of quantitative changes in pelvic organ support among parous women

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SUMMARY: Prior studies have suggested that pelvic organ prolapse, or sagging of the vaginal walls, is more common among women who have given birth. The goal of this study was to help us understand changes in vaginal support >5 years after childbirth, focusing on the impact of vaginal versus cesarean delivery.

Women in the MOAD study were evaluated annually. During a pelvic examination, vaginal wall support was measured at three points: the “anterior” (front) vaginal wall, the cervix (or top of the vagina), and the “posterior” (or back) vaginal wall. *We used these measurements to describe changes in vaginal support over time.*

In our analysis of these data, we compared pelvic organ support between women who had delivered at least one child vaginally versus those delivered exclusively by cesarean. We also considered the impact (if any) on vaginal support of other factors, including a woman’s race and her age at first delivery.

The results of this study included data from 1224 women, who participated for up to 9 years (for a total of 7055 woman-visits). One key finding was that the rate of change in support was fairly slow. For example, the support of the “anterior” (front) vaginal wall was worsened by approximately half of a centimeter over 5 years. Another key finding was that vaginal birth was associated with significantly worse support 5 years from first delivery. Also, women with at least one vaginal birth had more rapid worsening of support at the top of the vagina. Finally, the width of the vaginal opening was found to be a risk factor for poorer support 5 years from delivery as well as the rate of change in support over time.

We conclude that vaginal birth was associated with worse vaginal support 5 years from first delivery as well as with more rapid deterioration in support at the top of the vagina. Also, the size of a woman’s vaginal opening appears to be linked to her risk of prolapse progression.

The full text of this study is found at

Handa VL, Blomquist JL, Roem J, Muñoz A. Longitudinal study of quantitative changes in pelvic organ support among parous women. *Am J Obstet Gynecol.* 2018 Mar;218(3):320.e1-320.e7.

