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TITLE: PELVIC ORGAN SUPPORT AMONG PRIMIPAROUS WOMEN IN THE FIRST YEAR AFTER CHILDBIRTH

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PRESENTATION TYPE: Oral or Poster

CATEGORY: Clinical ABSTRACT BODY:

**Objectives:** The objective of this study is to describe pelvic organ support 6-12 months after first delivery.

**Methods:** This is an ancillary analysis of data from Childbirth and Pelvic Symptoms Imaging Study. We describe pelvic organ prolapse quantification (POP-Q) examinations in primiparous women, 6-12 months after childbirth. Three cohorts of women were included, based on delivery type: (1) vaginal delivery with sphincter tear (n=106); (2) vaginal delivery without sphincter tear (n=108); (3) cesarean without labor (n=39).

**Results:** Almost one-third of women had stage II support 6-12 months postpartum. Prolapse to or beyond the hymen was present in all three cohorts: 16/106 (15%) after vaginal delivery with sphincter tear, 20/108 (18.5%) after vaginal delivery without sphincter laceration and 2/39 (5%) after cesarean without labor (p=0.23). Post-hoc power analysis suggested that a study of 132 women in each group would be required for 80% power to test the difference between these prevalence estimates. POP-Q data for the 3 cohorts are shown in the table. There is a trend toward poorer support of the anterior vaginal wall in the vaginal delivery cohorts (as compared to the cesarean without labor). However, other measures appear to be similar among cohorts.

**Conclusions:** Based on these data, we conclude that there may be differences in pelvic organ support among the 3 modes of delivery. However, this sample size is not sufficient to identify or exclude significant differences between groups. These data add to the scarce literature addressing objectively measured pelvic organ support following the first delivery.

## **TABLE TITLE:**

Pelvic organ prolapse quantification results, 6-12 months after delivery (mean±SD)

# Pelvic organ prolapse quantification results, 6-12 months after delivery (mean±SD)

POP-Q measure	Vaginal delivery with anal sphincter tear (N=106)	Vaginal delivery without anal sphincter tear (N=108)	Cesarean delivery before labor (N=39)
Aa	-1.8 ± 1.1	-1.9 ± 1.0	-2.3 ± 0.8
Ва	-1.8 ± 1.1	-1.9 ± 1.0	-2.3 ± 0.8
С	-6.7 ± 1.6	-6.7 ± 1.6	-7.3 ± 2.3
D	-8.3 ± 1.3	-8.3 ± 2.0	-8.7 ± 2.9
GH, at rest	2.4 ± 0.8	2.4 ± 1.4	2.3 ± 0.8
GH, with strain	3.0 ± 1.1	2.9 ± 0.8	2.2 ± 0.9
PB, at rest	3.4 ± 0.9	3.4 ± 0.9	3.5 ± 1.0
PB, with strain	3.2 ± 0.9	3.5 ± 0.9	2.9 ± 1.1
Ар	-2.6 ± 0.7	-2.5 ± 0.6	-2.8 ± 0.4
Вр	-2.5 ± 0.7	-2.5 ± 0.6	-2.8 ± 0.4
TVL	9.0 ± 1.2	8.9 ± 2.6	8.9 ± 2.6

## **TABLE FOOTER:**

(No Image Selected)

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Ingrid Nygaard:
Kim Kenton:
Geoffrey Cundiff:
Chiara Ghetti:

Wen Ye:

Holly Richter:

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