

PELVIC FLOOR DISORDER SYMPTOMS 3 YEARS AFTER AN INDEX PREGNANCY AND THE RELATIONSHIP WITH DIFFERENT MODES OF DELIVERY

Hypothesis / aims of study

The aim of the study was to evaluate the prevalence of symptoms of pelvic floor disorders 3 years after an index pregnancy.

Study design, materials and methods

This is a 3 years follow-up of 2 cohorts of women. The first cohort included nulliparous women who were recruited for a prospective study on pelvic floor during and after the first pregnancy of Chinese women.(1) The second cohort was Chinese primiparous women who were recruited after an instrumental delivery for their first delivery.(2) Only 3 women of the second cohort had symptoms of urinary incontinence before the pregnancy. Information of their first delivery was available. Information of the second delivery, if any, was retrieved from medical notes or women using standard datasheet. Both spontaneous delivery and instrumental delivery were regarded as vaginal delivery. Their symptoms of stress urinary incontinence (SUI), urge urinary incontinence (UUI), fecal incontinence (FI) and pelvic organ prolapse (POP) symptoms have been explored with Pelvic Floor Distress Inventory.(3)

Results

In all, 408 women, with a mean of 39 months after the index pregnancy, had completed the study. Among them, 165 (40.4%) had a second delivery. The prevalence of SUI, UUI, FI and symptoms of POP were 38.2%, 9.1%, 6.9% and 10.0% respectively. Only ever vaginal delivery (ORs 2.06, 95% CI 1.08-3.94) and higher current BMI (ORs 1.09, 95% CI 1.03-1.16) were two independent factors increasing the risk of women reporting SUI. Maternal age at first delivery, largest birth weight of baby, current age and BMI of women, and ever vaginal delivery were not found to be factors for UUI, FI or POP at 3 years after the first delivery

Interpretation of results

Only ever vaginal delivery (ORs 2.06, 95% CI 1.08-3.94) and higher current BMI (ORs 1.09, 95% CI 1.03-1.16) were two independent factors increasing the risk of women reporting SUI. However, these were not factors for symptoms of other pelvic floor disorders, such as UUI, FI or POP.

Concluding message

Ever vaginal delivery and/or higher current BMI increased the risk of women reporting SUI 3 years after their first delivery.

Table 1. Characteristics of women and prevalence of symptoms of pelvic floor disorders according to history of mode of deliveries.

	All	One vaginal delivery	Two vaginal deliveries	One vaginal delivery and one CS	Two or more CS
Characteristics	N = 408	n = 243	n = 94	n = 11	n = 60
Current age (years)	34.7 (3.7)	34.7 (3.8)	34.1 (3.5)	35.0 (4.8)	35.5 (3.4)
Maternal age at first delivery (years)	30.6 (3.9)	30.5 (3.9)	30.1 (3.8)	29.7 (4.2)	31.4 (3.9)
Current weight (kg)	55.5 (10.5)	54.9 (10.3)	56.4 (9.2)	54.7 (11.0)	57.0 (13.1)
Current BMI (kg/m ²)	21.9 (3.9)	21.6 (4.1)	22.2 (3.6)	21.7 (3.6)	22.6 (3.6)
Largest birth weight (kg)	3.16 (0.43)	3.11 (0.41)	3.34 (0.35)*	3.37 (0.58)	3.13 (0.55)**
Duration since first delivery (months)	39.1 (4.3)	37.9 (3.8)	40.8 (4.7)*	39.1 (3.9)	41.0 (4.4)*
Symptoms					
SUI	156 (38.2%)	101 (41.6%)	36 (38.3%)	4 (36.4%)	15 (25.0%)
UUI	37 (9.1%)	26 (10.7%)	8 (8.4%)	0	3 (5.0%)
FI	28 (6.9%)	18 (7.4%)	5 (5.3%)	2 (18.2%)	3 (5.0%)
POP symptoms	41 (10.0%)	29 (11.95)	8 (8.5%)	0	4 (6.7%)

BMI body mass index, CS cesarean delivery, FI fecal incontinence, POP prolapse, SUI stress urinary incontinence, UUI urge urinary incontinence.

Data are presented in mean (standard deviation) or number (percentage)

*P<0.05 when compared with one vaginal delivery group, **P<0.05 when compared with two vaginal deliveries group

References

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Disclosures

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