

PELVIC FLOOR SYMPTOMS INCREASE AFTER CHILDBIRTH EVEN AFTER A LOW BIRTH WEIGHT DELIVERY

Aims of Study

To assess pelvic symptoms in primiparous women compared to age-matched nulliparous controls.

Methods

After IRB approval, a 9item pelvic symptom questionnaire was sent to all women who had a VBAC or preterm delivery at University Medical Center between 1998-2002. Only primigravid women aged 19-35 yrs were included in this analysis. We also included a randomly selected group of primigravidas who had term deliveries and a convenience sample of nulliparas. Analysis was restricted to age matched nulliparous and primiparous women. The chi-square test, Fisher's exact test and backward stepwise logistic regression were used for analysis.

Results

The study groups included 144 nulliparas and 58 primigravidas. The groups were comparable for age [mean age 26.5 (20- 35)]. For the primigravid women, the mean birthweight was 2535 g (250-4750), and mean gestational age was 35 wks (21-42). The delivery route for primigravid women was predominantly vaginal (69%). No subject had a multiple gestation. All pelvic symptoms, except fecal incontinence, were more common in primigravid women.

| | Nulligravid N=144 | Primigravid N=58 | P- value |
|--------------------------------|----------------------|---------------------|----------|
| Urinary Urgency | 25 (17.4%) | 25 (43%) | P<0.0005 |
| Urinary Leakage | 15 (10.4%) | 22 (38.6%) | P<0.0005 |
| Difficulty Voiding | 5 (3.5%) | 14 (24.1%) | P<0.0005 |
| Difficulty Defecating | 16 (11.1%) | 15 (25.9%) | P<0.008 |
| Difficulty with Intercourse | 5 (3.7%) | 18 (31.0%) | P<0.0005 |
| Symptoms of Prolapse | 1 (0.7%) | 7 (12.5%) | P<0.0005 |
| Fecal Incontinence | 11(7.6%) | 8 (13.8%) | P=0.175 |
| Inability to stop urine stream | 7 (4.9%) | 15 (25.9%) | P<0.0005 |

None of the primigravid women who responded to the questionnaire (N= 82) reported pre-pregnancy symptoms of voiding difficulty, or inability to stop their urine stream. Six women reported pre-pregnancy urgency and 6 women experienced urinary leakage. Six women reported defecatory dysfunction, 3 women had fecal incontinence, 2 women had prolapse symptoms and 6 women reported difficulty with intercourse prior to pregnancy. Most of these women remained symptomatic after delivery.

Of those who reported symptoms during pregnancy, 37/67 (55%) with urgency, 38/54 (70%) with leakage and 16/ 28 (57%) with defecatory dysfunction had continuing symptoms at the time of questionnaire.

Logistic regression for age, race, level of education and delivery mode showed childbirth by any route was significantly associated with any pelvic floor symptoms. Birth weight was not related to presence of these pelvic symptoms. Women who delivered vaginally or by cesarean section reported similar frequencies of fecal incontinence, prolapse symptoms, difficulty voiding and inability to stop their urine stream. Women who had a vaginal delivery had significantly more urinary urgency and leakage, difficult defecation and problems with intercourse than women who had a cesarean section.

Conclusions

Parous women have significantly more pelvic symptoms than age matched nulliparous controls, regardless of delivery route, birth weight or gestational age at the time of delivery. These findings suggest that factors during pregnancy in addition to delivery factors contribute to these pelvic symptoms.