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HOW DO THE PREVALENCES OF UROGENITAL SYMPTOMS CHANGE AFTER THE FIRST CHILDBIRTH?

Hypothesis / aims of study

Symptoms of pelvic floor dysfunction are common in the female population. Urinary incontinence, voiding difficulty and genital prolapse are all related to disturbances in the normal pelvic floor function. Childbirth, which has been related to the occurrence of both damage to the muscular and connective tissue of the pelvic floor as well as to it's innervation, is believed to be a major factor in the pathophysiology. It is known that urogenital symptoms and especially lower urinary tract symptoms (LUTS) are common during pregnancy and the prevalence increases with gestational age. After delivery, the prevalences of symptoms promptly decrease, indicating that the pregnant uterus may play a role. If women are bothered by these symptoms during pregnancy or after childbirth is largely unknown.
The objective of this study was to report on the changes in prevalence of urogenital symptoms between pregnancy and the first year after childbirth. We also evaluated the amount of bother women experiences from these symptoms.

Study design, materials and methods

At 12 weeks gestation, 257 nulliparous women were recruited from eight midwifery practices. They took part in a prospective longitudinal cohort study on the effects of pregnancy on pelvic floor function. The study was approved by the Medical Ethics Committee. All women signed an informed consent. The women received five self-report questionnaires. Questionnaires were sent during pregnancy at 12, 24 and 36 weeks gestation. Two questionnaires were sent at 3 and 12 months after delivery. One woman did not answer the UDI in the first questionnaire. Nine women did not answer the UDI in the fourth questionnaire. Fifty-one women who delivered before 36 weeks gestation and 32 women, who were pregnant again one year after childbirth, were excluded. Urogenital symptoms were measured with the validated Urogenital Distress Inventory (UDI). [1,2] This questionnaire consists of questions about micturition symptoms and the experienced level of discomfort of these symptoms. Each item measures if a symptom is present and the amount of bother the woman experiences from that symptom. Urogenital symptoms were assessed according to the recommendations of the ICS, and in concordance with other studies. A bothersome symptom was defined as reporting moderately or greatly bother from the symptom. The symptom was regarded as not bothersome if it was absent or present with none or only slight degree of bother. The statistical analysis was done in SPSS 10.0 for Windows.

Results

The mean age was 30,2 (SD 3,7). In table 1 the prevalences of urogenital symptoms in relation to gestational age and childbirth are shown. Table 2 shows the prevalences of bothersome urogenital symptoms in relation to gestational age and childbirth.

Interpretation of results

The prevalence of frequency and urgency symptoms are high during pregnancy, but decrease promptly after the delivery. The prevalence of true urinary incontinence symptoms increases with gestational age and decrease slightly after childbirth, but still one third of the women experiences urinary stress incontinence one year after delivery.
Despite the high prevalences of urogenital symptoms the majority of women is not bothered by it. Overactive bladder symptoms are not only highly prevalent but are also reported to be the most bothersome during pregnancy. After delivery urogenital symptoms are reported to be bothersome by less than 3 percent of the women.

Concluding message

During pregnancy overactive bladder symptoms are most troublesome and highly prevalent, but after childbirth these symptoms disappear in the majority of women. This spontaneous decrease in the prevalence of overactive bladder symptoms as well as true urinary

incontinence symptoms makes it questionable if interventions for these symptoms are warranted shortly after childbirth.

Table 1 The prevalences of urogenital symptoms in relation to gestational age

	12 weeks gestation N = 256	**24 weeks gestation N = 257**	**36 weeks gestation N = 206**	**3 months postpartum N = 248**	**12 months postpartum N = 221**
Frequency	193 (75,4)	215 (83,7)	172 (83,5)	25 (10,1)	44 (19,9)
Urgency	159 (62,1)	170 (66,4)	142 (68,9)	98 (39,5)	94 (42,5)
Urge incontinence	16 (6,3)	42 (16,4)	43 (20,9)	38 (15,3)	31 (14,0)
Stress incontinence	56 (21,9)	111 (43,4)	98 (47,6)	66 (26,6)	74 (33,5)
Feeling prolapse	29 (11,3)	29 (11,3)	31 (15,0)	31 (12,5)	24 (10,9)
Seeing prolapse	8 (3,1)	8 (3,1)	8 (3,1)	8 (3,2)	8 (3,6)
Incomplete bladder emptying	82 (32,0)	134 (52,1)	107 (51,9)	38 (15,3)	46 (20,8)
Difficulty emptying the bladder	41 (16,0)	63 (24,6)	65 (31,7)	20 (8,1)	27 (12,2)

The values are numbers (percentages)

Table 2 The prevalences of bothersome urogenital symptoms in relation to gestational age

	12 weeks gestation N=256	**24 weeks gestation N=257**	**36 weeks gestation N = 206**	**3 months postpartum N=248**	**12 months postpartum N=221**
Frequency	42 (16,5)	51 (19,8)	50 (24,4)	4 (1,6)	7 (3,2)
Urgency	35 (13,8)	40 (15,6)	25 (12,1)	9 (3,7)	5 (2,3)
Urge incontinence	1 (0,4)	9 (3,5)	10 (4,9)	5 (2,0)	3 (1,4)
Stress incontinence	6 (2,3)	18 (7,1)	19 (9,3)	11 (4,4)	5 (2,3)
Feeling prolapse	3 (1,2)	7 (2,7)	5 (2,4)	12 (1,6)	3 (1,4)
Seeing prolapse	1 (0,4)	1 (0,4)	2 (1,0)	4 (0,8)	2 (0,9)
Incomplete bladder emptying	9 (3,5)	17 (6,6)	15 (7,3)	6 (2,4)	6 (2,7)
Difficulty emptying the bladder	6 (3,5)	11 (4,3)	16 (7,8)	6 (2,4)	6 (2,7)

The values are numbers (percentages)

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