

PROTRACTED POSTPARTUM URINARY RETENTION – A LONG TERM PROBLEM OR A TRANSIENT CONDITION?

Hypothesis / aims of study

Protracted postpartum urinary retention, defined as clinically overt urinary retention beyond the third postpartum day, is an uncommon complication. It is usually self-limited with complete resolution is expected within 28 days by early diagnosis and timely intervention (1). Data regarding the future consequences of this clinical situation is lacking.

The objective of this study was to compare long term urinary, fecal and prolapse related symptoms in parturients that had protracted postpartum urinary retention with those that did not.

Study design, materials and methods

The term Protracted Postpartum Urinary Retention (PPUR) was defined as the absence of adequate voiding beyond the third postpartum day. In a retrospective analysis, all cases of PPUR between 2005 and 2014 in one tertiary medical center were compared to a control group. Study group comprised 23 women who developed PPUR. Control group comprised 46 women (two controls for each case of PPUR) matched by age, parity, delivery date, mode of delivery, neonatal weight, and use of epidural, that did not develop urinary retention. Long term follow-up for symptoms of urinary, fecal or prolapse related complaints were evaluated based on the pelvic floor distress inventory-short form (PFDI-20) questionnaire.

The Mann-Whitney rank sum test was used for continuous measurements and chi-square test for categorical measurements. A P value <0.05 was considered statistically significant.

Results

There was no difference between the groups in demographic or clinical and obstetric characteristics (Table 1). Assessment of patient's symptoms, in a follow-up of 56 to 60 months, by urinary scale (UDI-6), colorectal scale (CRADI-8), and prolapse scale (POPDI-6) of PFDI-20 were similar in both groups (Table 2).

Interpretation of results

Protracted postpartum urinary retention is usually self-limited by early diagnosis and timely intervention. Future consequences in terms of urinary and colorectal function or prolapse were not affected, compared to normal parturients.

Concluding message

Protracted postpartum urinary retention is most probably a transient condition not affecting long term urinary and colorectal function or prolapse.

Table 1. Patients characteristics

Mean \pm SD* or N (%)	Study group (n = 23)	Control group (n = 46)	<i>p</i>
Age (yo)*	27.4 \pm 5.2	27.6 \pm 4.7	0.88
Gravidity*	2.0 \pm 1.4	1.7 \pm 1.3	0.50
Parous*	0.4 \pm 0.6	0.5 \pm 0.9	0.40
BMI*	23.4 \pm 11.5	25.3 \pm 4.2	0.11
Gestational age (weeks)*	39.2 \pm 1.2	38.9 \pm 2.4	0.59
Oxytocin induction/augmentation	12 (52.2%)	15 (32.6%)	0.19
Epidural analgesia	23 (100%)	43 (93.5%)	0.55
Second stage of labor (min)*	139.0 \pm 74.2	77.2 \pm 76.9	0.003
Prolonged second stage	8/21 (38.1%)	5/34 (14.7%)	0.06
Spontaneous vaginal delivery	10 (43.5%)	20 (43.5%)	
Vacuum extraction	6 (26.1%)	12 (26.1%)	
Outlet forceps	1 (4.3%)	2 (4.3%)	
Cesarean section	6 (26.1%)	12 (26.1%)	
Birth weight (g)*	3373.3 \pm 470.8	3278.2 \pm 325.0	0.39
Episiotomy	15 (65.2%)	20 (43.5%)	0.15

Table 2. Outcome

Mean \pm SD* or N (%)	Study group (n = 23)	Control group (n = 46)	<i>p</i>
Follow-up (months)*	56.1 \pm 36.7	60.7 \pm 38.2	0.63
Patients for Follow-up	17 (73.9%)	32 (69.6%)	0.92
POPDI-6*	4.2 \pm 8.0	1.4 \pm 4.6	0.268
CRADI-8*	0.4 \pm 1.3	0.0 \pm 0.0	0.332
UDI-6*	6.9 \pm 12.5	4.7 \pm 9.0	0.583
PFDI-20*	11.4 \pm 19.5	6.1 \pm 12.1	0.381
POPDI-6 = Pelvic Organ Prolapse Distress Inventory (questions 1 – 6)			
CRADI-8 = Colorectal-Anal Distress Inventory (questions 7 – 14)			
UDI-6 = Urinary Distress Inventory (questions 15 – 20)			
PFDI-20 = Pelvic Floor Distress Inventory (questions 1 – 20)			

References

1. Protracted postpartum urinary retention: the importance of early diagnosis and timely intervention. *Neurourol Urodyn.* 2011 Jan;30(1):83-6.

Disclosures

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