









#25773 Voiding diary parameters according to vaginal delivery in Spanish women

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Hypothesis / aims of study

☐ 45% reports voiding disorders such as urinary incontinence, which has a negative impact on quality of life¹.

Different groups

- ☐ Uni/multiparous women¹
- Pregnancy¹

> Urinary incontinence¹

- Instrumented vaginal delivery¹
- □ Nulliparous women² □
 - Age affects the pelvic floor muscles²

> Urinary incontinence²

Diagnostic test

- ☐ The three days voiding diary³
- Objective non-invasive diagnostic test that is highly reliable and related subjective symptoms (frequency, urgency and incontinence) and fluid intake³.



This study aimed to evaluate voiding diary parameters according to parity and vaginal birth route in the Spanish population.

Study design, materials and methods



• This is a cross-sectional study.



 Which included young nulliparous (n=55) and uni/multiparous (n=35) women aged 18 to 65 years.



• The sociodemographic and clinical data included in the voiding diary were collected for three days, to describe their behavior (daily diuresis frequency ≤ 7, 24 hours diuresis frequency ≤ 8, maximum voiding volume, total amount of urine during the day, whether urine leakage exists, sensation of urgency and what activity was being performed at the time of leakage).

NOMBRE:	DIARIO MICCIONAL													
HORA	LIQUIDOS INGERIDOS		MICCIONES	PÉRDIDAS DE ORINA			SENSACIÓN DE URGENCIA		¿Qué estaba haciendo en el					
24H	Tipo de líquido	Cantidad	cantidad orinada	Poco	Moderada	Abundante	SI	NO	momento de la pérdida?					
\vdash														
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Figure 1: Voiding diary. Adapted from Walker, C. (2013). 2ª edition.



Data were analyzed according to the existence of previous vaginal delivery. Descriptive and comparative analyses (Student-t, X²-test or Fisher-test) were applied for categoric and continuous variables. Statistical significance was considered when P<0.005.

Results

- ☐ The mean age was higher in uni/multiparous women than in nulliparous women.
- ☐ The high frequency of 24 hours diuresis, the presence of urine leakage, and of sense of urgency and what was being done at the time of leakage were more frequent in uni/multiparous women, although no statistical significance was achieved (Table 1).

Table 1. Most representative voiding parameters during three days in voiding diary and sociodemographics aspects in nulliparous and uni/multiparous women.

	Null		ous group =55)	Uni/multiparous group (n=35)		p-value
AGE (years)		24.95 ± 8.2 a		48.60 ± 7.59		<0.001 ^d
	Frequency 24 H >8	11 b	20% ^c	9	25.7%	0.606
VD dov. 4	Strong Urine loss	1	1.8%	2	5.7%	0.158
VD day 1	Urgency sense	13	23.6%	11	31.4%	0.468
	Loss moment: moderate effort	3	5.5%	2	5.7%	0.881
	Frequency 24 H >8	7	12.7%	8	22.9%	0.252
VD day 2	Strong Urine loss	1	1.8%	1	2.9%	0.564
•	Urgency sense	17	30.9%	12	34.3%	0.818
	Loss moment: moderate effort	2	3.6%	2	5.7%	0.825
	Frequency 24 H >8	10	18.9%	12	34.3%	0.130
VD day 3	Strong Urine loss	1	1.8%	2	5.7%	0.503
	Urgency sense	11	20%	14	40%	0.054
	Loss moment: moderate effort	2	3.6%	2	5.7%	0.911

Values expressed as a means \pm SD. b Frequencies. c Percentage (%). d Significant difference (P<0.05) between groups. Abbreviations: VD: voiding diary.

Interpretation

- □ Voiding parameters collected in the voiding diary could be affected by vaginal delivery, being predominant in uni/multiparous women with respect to nulliparous women.
- □ In uni/multiparous women, an affectation of the anatomy and innervation of the pelvic floor muscles appears¹ which, together with age, leads to an increase in nocturnal polyuria in more than 33% of cases, causing urinary incontinence. This is observed in European countries in 54.5% of the cases, as well as in Asian countries in 20%².
- ☐ The voiding diary is supported in clinical practice for the diagnosis, evaluation and treatment of clinical states in which urinary incontinence occurs³.

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Conclusions

Voiding parameters of the voiding diary that are related to urinary incontinence could be more frequent when women had vaginal delivery. The voiding diary could be applied in Spanish women for clinical purposes.

References

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