

**CORRELATION BETWEEN FAECAL INCONTINENCE AND URINARY DISORDERS: AN OBSERVATIONAL STUDY****Aims of study**

Twenty-nine percent of women with lower urinary tract disorders complain also of anal incontinence [1]. Despite the growing interest in double incontinence, the relationship between these two disorders remains poorly characterised. The aim of our study is to evaluate the prevalence of anal incontinence in an urogynaecological setting and to investigate the relationship between lower urinary tract dysfunction and anal incontinence

**Methods**

Consecutive women referred for lower urinary tract dysfunction underwent a thorough urogynaecological assessment, including specific questions on anal incontinence divided into passive and/or urge incontinence. The Browning and Parks classification was used [2]. This anal incontinence score permits to classify continence, incontinence only for flatus, control over solid but incontinence for liquid stool and flatus, and incontinence for solid and liquid stool and flatus. The frequency of incontinent episodes was recorded as: monthly (fewer than three episodes per month), weekly (less than three episodes per week), daily (one episode every day), two or more episodes per day. A standard urodynamic study or videocystourethrography completed the investigations. All the data were collected and stored into a specifically designed database. We then calculated the prevalence of anal incontinence. Clinical and instrumental findings in women with exclusively urinary disorders were compared with the ones complaining of double incontinence. Finally some comparison was done dividing women with urge and passive anal incontinence. A JMP software was used for statistical analysis. For continuous data the non parametric Wilcoxon rank sum test was used, whereas contingency tables were used for categorical data, and a p value < 0.05 was considered significant.

**Results**

Double incontinence had a prevalence of 20.3%. Table 1 shows the comparison between women with only urinary disorders and women with double incontinence.

Table 1: Comparison between women with only urinary disorders and women with double incontinence.

	<b>Urinary Disorders only (n. 251)</b> <i>Mean ± SD</i>	<b>Double Incontinence (n. 64)</b> <i>Mean ± SD</i>	<b>P value</b>
<b><u>History</u></b>			
Age (years)	54.4 ± 12.32	58.8 ± 10.55	0.008
Menopausal status (%)	77.8	63.6	0.037
Parity (n.)	2.05 ± 1.46	2.59 ± 1.54	0.004
Vaginal delivery (n.)	1.97 ± 1.46	2.48 ± 1.64	0.013
Birth-weight (gr.)	3648 ± 663.2	3878 ± 701.4	0.023
<b><u>Urinary symptoms (V.A.S.)</u></b>			
Prolapse symptoms	3.62 ± 3.44	4.13 ± 3.45	N.S.
Stress Incontinence	5.59 ± 3.57	5.70 ± 3.59	N.S.
Frequency	4.39 ± 3.67	5.11 ± 3.79	N.S.
Nocturia	3.82 ± 4.26	2.85 ± 2.97	N.S.
Urgency	4.92 ± 3.75	6.10 ± 3.92	0.019
Urge Incontinence	4.21 ± 3.79	5.25 ± 3.86	N.S.

N.S. = Non significant

In two cases history did not discriminate between passive and urge faecal incontinence; 4 women complained of both kind of anal incontinence. Of the remaining 58 patients 30 complained of passive incontinence, whereas 28 complained of urge faecal incontinence. Table 2 shows the comparison of the characteristics of women with passive and urge anal incontinence with women only affected by urinary disorders.

*Table 2: Comparison between women with passive and urge anal incontinence with women only affected by urinary disorders.*

	<b>Urinary Disorders only (n. 251)</b> <i>Mean ± SD</i>	<b>Passive Anal Incontinence (n.30)</b> <i>Mean ± SD</i>	<b>Urge Anal Incontinence (n. 28)</b> <i>Mean ± SD</i>	<b>P value</b>
Age (years)	54.4 ± 12.32	56.8 ± 10.0	60.3 ± 12.0	* 0.009
Parity (n.)	2.05 ± 1.46	2.63 ± 1.43	2.64 ± 1.73	§ 0.014
Birth-weight (gr.)	3648 ± 663.2	3759 ± 673	4004 ± 702	* 0.014
Urgency (V.A.S.)	4.92 ± 3.75	5.06 ± 4.1	7.68 ± 3.23	* <0.000
Urge incontinence (V.A.S.)	4.20 ± 3.79	4.63 ± 3.77	6.2 ± 4.07	* 0.012

\* Comparison between Urge Anal Incontinence and Urinary Disorders only

§ Comparison between Passive Anal Incontinence and Urinary Disorders only

After urodynamics we did not find significance in the distribution of women with faecal incontinence in each diagnostic class. However when we separately analysed passive and urge anal incontinence, we found a significant correlation between the former and GSI (43.3% vs 17.9% p=.0361), as well as the latter and unstable bladder (10% vs 28.6% p=.0714).

### **Conclusions**

Anal incontinence is highly prevalent in women with lower urinary tract disorders. The observed correlation between anal and urinary disorders in double incontinent women in this study can raise different and interesting speculations. However we believe that future studies should be designed to instrumentally confirm our data.

1. Prevalence of faecal incontinence among women with urinary incontinence. Br. J. Obstet Gynaecol. 1998;105:1211-1213

Postanal repair for idiopathic faecal incontinence: correlation of clinical results and anal canal pressure. B J Surg 1983;70:101-104