Abstract 86: THE ONSET OF FAECAL INCONTINENCE IN PREMENOPAUSAL. DIFFERENCES BETWEEN WOMEN WHO STARTED AT INMEDIATE POSTPARTUM OR YEARS AFTER

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Hypothesis

Traumatic vaginal delivery is a risk factor for faecal incontinence (FI). There is scarce information about the differences in the pathophysiology of FI in women that was initiated symptoms immediately postpartum or later in life.

Our **hypothesis** is that women who initiated symptoms in the postpartum showed more severe structural and neurological abnormalities than women with obstetric injuries who initiated symptoms later in life.

The **aim** of the present study was to analyse the differences between both groups, focused on anatomical defects detected by 3D-endoanal ultrasound (EAUS) and neurological abnormalities in electrophysiological studies.

Methods and Materials

A cross-sectional retrospective study was designed, including patients with symptoms of FI who consecutively attended a Digestive Motility Unit. Women who initiated symptoms of FI immediately postpartum (**Group 1**) or years after delivery (**Group 2**) were compared. Women with history of caesarean section without any vaginal delivery, nulliparas, >50 years of age and women with other possible etiological factor for FI (diarrhea, anal or pelvic surgery, neurological diseases) were excluded, in order to select only women with FI related with obstetric injury. Women with only flatus incontinence were also excluded.

The following **interventions** were performed to all patients: Wexner questionnaire, anorectal manometry, EAUS (probe-2052, BK-Medical) (Figure 1), external anal sphincter electromyography (EMG), and pudendal nerve terminal motor latency (PNTML) with St.Mark's electrode. Quantitative variables were analyses using Mann-Whitney U-test, whereas qualitative variables, using Fisher exact test.

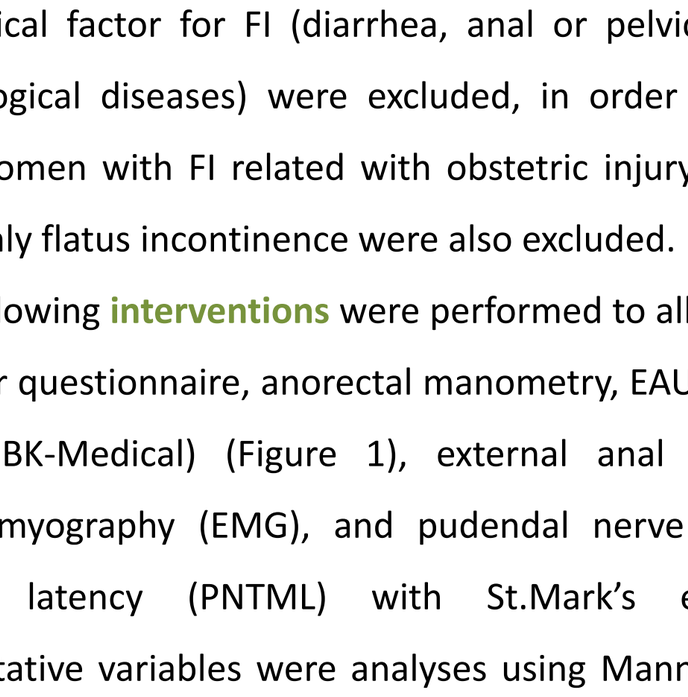

Figure 1. Obstetric anal sphincter type IIIc (defect in anal external sphincter and internal anal sphincter). Axial plane of the anal sphincter complex (probe 2052, BK Medical).

Results

A total of **75 women** with FI were included in the study: 44 women in Group 1 (immediately postpartum) and 31 women in Group 2 (later in life). Results of the comparison between groups are shown in Table-1.

Table 1. Comparison between women who initiated symptoms of faecal incontinence (FI) immediately postpartum (Group 1) or years after delivery (Group 2).

	Group 1:n FI postpartum (n=44)	Group 2: FI later (n=31)	p
Age (median±SD) in years	37.1±5.4	45.9±4.6	<0.001
Parity (median±SD)	1.4±0.4	1.6±0.5	0.06
History of forceps delivery n (%)			
Severity of FI (Wexner) (median±SD)	11.0±4.6	11.5	NS
Endoanal ultrasound n (%)			0.009
Normal	17 (38.6%)	22 (71.0%)	
Abnormal	27 (61.4%)	9 (29.0%)	
EAS defect	20	7	
IAS defect	2	1	
EAS + IAS defect	5	1	
Degree of EAS defect (median±SD)	47.1±62.8	17.5±39.3	0.02
Degree of IAS defect (median±SD)	19.9±54.3	11.6±44.9	NS
Electromiography n (%)			NS
Normal	11 (25%)	10 (32.3%)	
Abnormal	33 (75%)	21 (67.7%)	
Unilateral	18	8	
Bilateral	15	13	
Pudendal nerve terminal motor latency n (%)			Ns
Normal	17 (38.6%)	16 (51.6%)	
Abnormal	27 (61.4%)	15 (49.4%)	
Unilateral	14	9	
Bilateral	13	6	
Manometry n (%)			0.017
Normal	13 (29.5%)	8 (25.8%)	
Abnormal	31 (70.5%)	23 (74.2%)	
EAS insuficiency	3	6	
IAS insuficiency	4	9	
EAS + IAS insuficiency	24	8	

Interpretation of results

Abnormal EAUS is significantly more common in women who started FI symptoms at postpartum. Manometry and EMG was abnormal in more than two thirds in both groups. Both ultrasound and neurophysiological studies should complement the manometry in process of diagnosis in women <50 years with FI.

Conclusions

Women with symptoms of FI immediately postpartum showed more structural defects in the EAUS, with higher degree of severity in the EAS.