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PELVIC FLOOR SYMPTOMS AFTER DELIVERY: HOW DO THEY CHANGE WITHIN ONE YEAR?

Hypothesis / aims of study

Pelvic Floor Dysfunctions (PFDs) are highly prevalent after delivery, with figures up to 46% reported in the literature[1]. They are responsible for significant morbidity soon after delivery and particularly later in life [2]. Strategies to prevent the consequences of obstetric trauma are of outmost importance. In this view a better understanding in symptoms characteristic and their changes with time are of value. In the present study we aimed at assessing the evolution of symptoms one year after delivery in women symptomatic for PFDs 3 months after delivery.

Study design, materials and methods

This is a prospective observational cohort study on PFDs after delivery focusing on symptom changes between 3 and 12 months follow-up. IRB approval was obtained. All the women ≥ 32 weeks gestational age who delivered between July and December 2014 in an Italian Tertiary Referral Maternity Hospital were invited to a PFC follow-up 3 months after delivery. Six-hundred-eighty-five puerperae actually came to PFC 3 month after delivery and among them 238 women presented with pelvic floor symptoms according to the criteria reported in table 1.

Table 1:Selection criteria for PFDs 3 and 12 months after delivery[3]

PFDs	**Measurement tool**	**Cut off**
Urinary incontinence (UI)	ICI-Q SF	≥ 1
Anal Incontinence (AI)	Wexner score	≥1solid/liquid &/or ≥2 gas
Prolapse	POP q staging criteria	≥ 2
Pain/Dyspareunia	Pain &/or dyspareunia VAS	> 0
Perineal Testing	Oxford score (0-5)	≤ 2

Quality of Life (QoL) was also assessed with validated questionnaires (IQOL for UI, F-IQOL for AI and FSFI for Dyspareunia).
All the 238 women symptomatic 3 months after delivery were invited to a 12 month PFC follow-up via a direct phone call with 2 subsequent recall for those who not attended. The same criteria were adopted at 12 months follow-up (Table 1). A specifically designed database was adopted and descriptive statistical analysis performed. Software Stata 9.0 (Stata Corporation, College Station, Texas, USA) was adopted and a p value < 0.05 was considered for significance.

Results

One-hundred-and-thirty-nine (58.4%) women actually attended the 12 month postnatal PFC. They were comparable to those who missed it for demography, obstetrical parameters and symptoms severity 3 month postpartum (Sum-rank test *p> 0.05*).
Seventy-four women (53.2%) were still symptomatic at 12 months postnatal PFC. Symptoms distribution was comparable between 3 and 12 month (Table 2), but the finding of combined symptoms was significantly more frequent at 12 months (Table3).

Table 2: Distribution of symptoms at 3 and 12 month follow-up postpartum

Symptoms	**3 month n° = 238 (%)**	**12 month n° = 74 (%)***
USI	86 (27%)	30 (27%)
Iurge	27 (8%)	15 (13%)
Mixed	15 (5%)	6 (5%)
Gas I	31 (10%)	5 (4%)
Faecal I	6 (2%)	6 (5%)
POP	4 (1%)	2 (2%)
Pain/Dispareunia	55 (17%)	17 (15%)
Muscle Disfunction	97 (30%)	31 (28%)
TOTAL n of symptoms	358	112

** p-value Fisher's Exact test = 0.226*

Table 3: Comparison of symptoms combination between 3 and 12 months postpartum follow-up

	Symptomatic women	
Symptom Combination	**3 months n° = 238 (%)**	**12 months n° = 74 (%)***
1 symptom	163 (68%)	42 (57%)
2 symptoms	67 (28%)	26 (35%)
3 symptoms	8 (3%)	6 (8%)

** p-value Fisher's exact test < 0.0001*

Except from the improvement in pain &/or dyspareunia the severity of symptoms remained unchanged (table 4), while the impact of symptoms on QoL worsened for UI and improved for dyspareunia (Table 5).

Table 4.: Evolution of Symptoms scores at 12 months in symptomatic women.

Symptoms [scores] (n pts)	**3 months**	**12 months**	***Value of p (paired t test)***
UI [ICI-Q SF] (28)	9.4 ± 3.7	8.7±3.5	*0.212*
AI [Wexner score] (5)	2.2±0.4	5± 2.7	*0.054*
Pain/Dyspareunia [VAS] (9)	8.2±2.4	6.2±2.0	*0.049*
Perineal Testing [Oxford score] (9)	1.3±0.7	1.6±0.7	*0.173*

Table 5: Evolution of QoL scores at 12 months in symptomatic women.

QoL questionnaire	**n. of pts.**	**Mean ± SD**	**Range (min-max)**	***P****
IQOL 3 months	119	91.4 ± 13.5	47-124	*0.003*
12 months	43	84.3 ± 16.9	39-110	
F-IQOL 3 months	12	107.7 ± 27.2	38-144	*0.492*
12 months	10	107.9 ± 17.5	71-134	
FSFI 3 months	48	44.2 ± 18.2	6-78	*0.007*
12 months	15	58.3 ± 20.3	6-85	

* Student t test

Interpretation of results

The adherence rate to a dedicated pelvic floor follow-up one year after delivery in women symptomatic 3 months postpartum is 58%. The subset of 139 puerperae that we were able to assess 12 months after delivery is representative of the whole population of the sudy. At 12 months follow-up 47% of previously symptomatic women become asymptomatic. In those still complaining of PFDs one year after delivery, symptoms distribution remains unchanged but more frequently symptoms associations were observed. Among them a significant reduction in the scoring for pain and dyspareunia reflects in an improvement at FSFI. Scores for UI (ICIqSF) remained unchanged, but a significant worsening in QoL was observed. Concerning AI the number of women complaining of Gas Incontinence reduced a lot, while the number of those complaining Faecal Incontinence didn't change. Worsening scores, close to statistical significance, were observed for AI without any modification over time on QoL.

Concluding message

Half of women symptomatic 3 months postpartum still complain of symptoms one year after delivery. At that time symptoms combination are more frequently observed. While pain and dyspareunia became less a problem with time, the persistence of UI shows a detrimental impact on QoL. FI in comparison to GI tend to persist as a clinical relevant problem. Our study further confirm the need to provide effective treatment for women symptomatic soon after delivery. Further studies with higher numbers are needed.

References

1. Int Urogynecol J. 2014; 25(11):1449-1452
2. Int Urogynecol J 2015 26:1115–1121
3. Pelviperineology, 2013;32(3):81-85

Disclosures

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