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PELVIC ORGAN PROLAPSE: A HIDDEN CONDITION. PREVALENCE AND CHARACTERISTICS OF UNDIAGNOSED PELVIC ORGAN PROLAPSE.

Hypothesis / aims of study

The prevalence of Pelvic Organ Prolapse (POP) in the general population is high, especially in postmenopausal women (1). POP can cause a variety of symptoms, of which only the feeling or seeing of a vaginal bulge is condition-specific. Because of the nature of the symptoms and a lack of knowledge about POP symptoms and treatment options in women, we expect that a notable portion of women with POP symptoms will not consult their doctor. Although psychological factors influencing help seeking behaviour, and thus diagnosis of POP have been studied, the relation between symptoms, POP stage and POP diagnosis remains largely unknown. The aim of this study is to assess the prevalence of untreated symptomatic POP in postmenopausal women in the general population and the relationship between symptoms on one hand and POP stage on the other hand, highlighting the differences between currently untreated women with and without an earlier diagnosis of POP.

Study design, materials and methods

This is a cross-sectional study within the context of a randomized controlled trial investigating the effects of pelvic floor muscle training and pessary treatment on POP symptoms and severity in elderly women. The study population consisted of all women older then 54 years with symptoms suggestive of POP, enlisted with 11 general practitioners (GPs). Exclusion criteria were cognitive impairment, poor physical condition, urogynecological malignancy, treatment of POP within the last 12 months and not being able to visit the general practitioner due to impaired mobility. Eligible patients received a postal questionnaire containing a validated POP screening questionnaire (2), with the addition of three questions concerning pressure in the pelvic region, splinting and earlier POP diagnosis and - treatment. Patients with one or more POP symptoms were asked to undergo a physical examination, during which POP stage (Pelvic Organ Quantification System; POP-Q) was determined and to fill out the Pelvic Floor Distress Inventory short version (PFDI-20). Data were analysed using SPSS version 16.0. Differences in means between groups were calculated using the Mann-Whitney test and Kruskal-Wallis test (non-parametric data). Associations between variables were analysed using chi-square test and Pearson's correlation coefficient.

Results

In 11 GP offices, 2966 women of 55 years and older received the postal questionnaire. Response was 1,741 (59%), 672 (39%) of the responders had POP symptoms, of whom 448 women (67%) agreed to participate in the study. For this analysis the data of the first 277 included patients were used. Mean age of the participants was 65 years (range 55-93).

207 women (75%) had POP, of whom 67 (32%) were already diagnosed and 47 had undergone treatment more than one year ago (table 1). Earlier treatment consisted of operation (49%), pelvic floor muscle training (21%) or pessary treatment (23%). Of the urinary incontinent women without earlier POP diagnosis (n=155), 77% had POP, of whom 65% had a POP stage 2 or more. The prevalence of undiagnosed symptomatic POP in the total population was 7.6% (95%CI: 6.5-8.9).

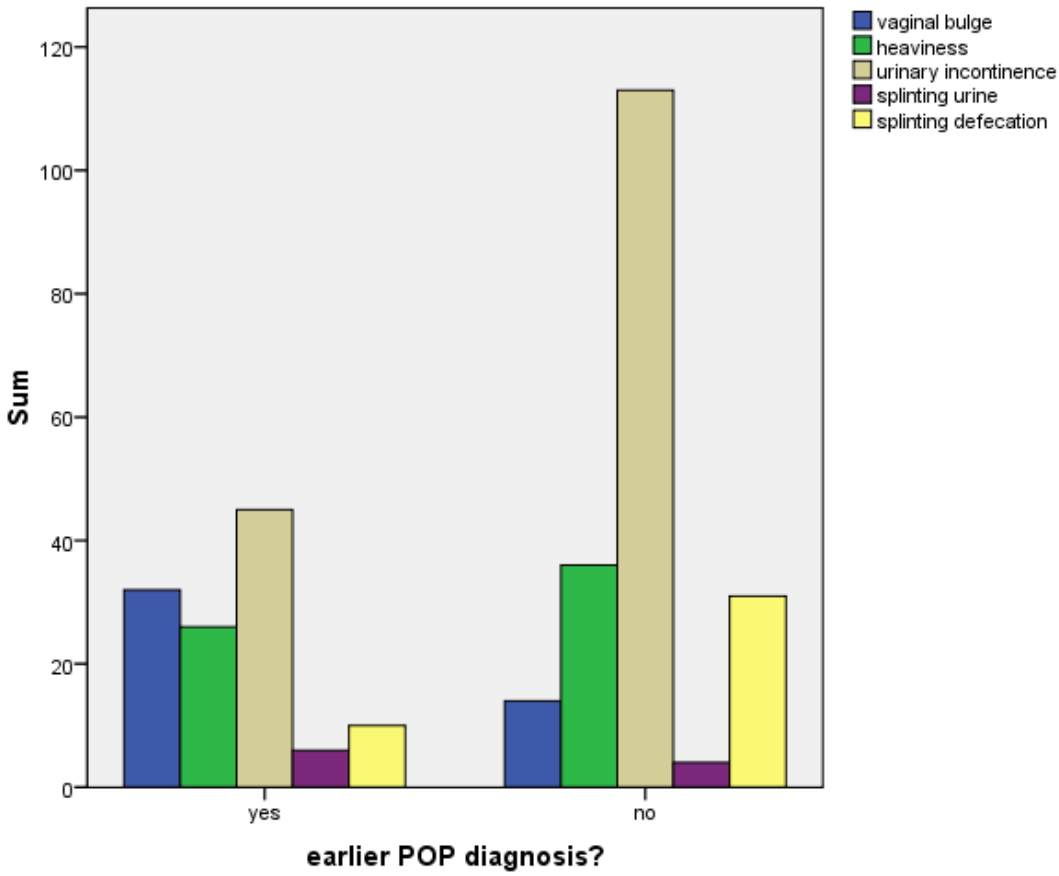
Urinary incontinence was more frequently seen in undiagnosed women (85%) than in women with earlier POP diagnosis (70%) (chi square, p=0.01) whereas vaginal bulging was less frequently seen in this group (49% of the diagnosed women versus 12% of the undiagnosed, chi square, p<0.001) (figure 1). Women with a previous diagnosis had more symptoms (median 2) than women without (median 1, Mann-Whitney, p=0.01). Median score on the POP subscale of the PFDI (POPDI-6) differed between women with stage POP 1 (8.3), 2 (16.7) and 3 (16.7) (Kruskal-Wallis, p=0.03). Median most distal point of the prolapse differed between women with (0) and without (-1) vaginal bulging (Mann-Whitney, p=0.01). No relevant significant correlations were seen between symptoms and PFDI score on the one hand and POP stage on the other hand.

Table 1:
Prolapse stage and severity in women with and without a previous POP diagnosis

	Prolapse stage (POP-Q ordinal scale)				Most distal point prolapse* (median, cm)
	1	**2**	**3**	**total**	
Previous diagnose (n)	16	34	17	67	0
No previous diagnose (n)	55	77	8	140	-1
Total (n)	71	111	25	207	
p-value	<0.001**				<0.001***

*Reference point is the hymen (POP-Q) **Kruskal-Wallis test ***Mann-Whitney test

Figure 1: Number of patients with symptoms in relation to a previous diagnosis of POP



Interpretation of results

Undiagnosed symptomatic POP is fairly common in the general population. Many undiagnosed women have POP stage 2 and even stage 3, although women with undiagnosed POP tend to have less severe POP than women with diagnosed currently untreated POP. Urinary incontinence is the most frequently seen symptom in patients with POP.
Women with undiagnosed symptomatic POP present a challenge: strategies should be developed to identify these women.

Concluding message

POP is a condition that frequently remains undiagnosed. Urinary incontinence is the most common characteristic of undiagnosed symptomatic POP.

References

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Is this a clinical trial?	**Yes**
Is this study registered in a public clinical trials registry?	**Yes**
Specify Name of Public Registry, Registration Number	**The trial is registered at the Dutch Trial Register (NTR2047)**
Is this a Randomised Controlled Trial (RCT)?	**Yes**
What were the subjects in the study?	**HUMAN**
Was this study approved by an ethics committee?	**Yes**
Specify Name of Ethics Committee	**The study was approved by the medical ethics committee of the University Medical Center Groningen, the Netherlands(METc2009.215)**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**